

Technical Support Document (TSD)  
for the Revisions to the Federal Implementation Plans to Reduce Interstate Transport of Fine  
Particulate Matter and Ozone Final Rule  
Docket ID No. EPA-HQ-OAR-2009-0491

**Final Revisions Rule Significant Contribution Assessment TSD**

U.S. Environmental Protection Agency  
Office of Air and Radiation  
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This Technical Support Document (TSD) presents quantitative assessments of the relationship between final revisions to the Transport Rule and the original analysis conducted for the final Transport Rule informing the Rule's determination of emissions that significantly contribute to nonattainment or interfere with maintenance of the National Ambient Air Quality Standards (NAAQS) in downwind states. As conducted for the final Transport Rule, EPA reiterated its analysis of the downwind air quality impacts resulting from the rule's projected SO<sub>2</sub> emission reductions using the Air Quality Assessment Tool (AQAT) and taking the finalized revisions into account. In this document, EPA also assesses the relationship between the NO<sub>x</sub> emission inventories in each affected state and the finalized revisions to annual NO<sub>x</sub> and ozone-season NO<sub>x</sub> budgets under the Transport Rule programs.

This technical support document presents results separately for the revisions described in the final revisions rule<sup>1</sup>, as well as those revisions described in the direct final revisions rule.<sup>2</sup> The final revisions rule includes increases to 2014 SO<sub>2</sub> budgets for Texas, New York, and Wisconsin. In the proposed revisions rule, EPA assessed the emission increases on a state-by-state as well as a collective basis. For the final revisions rule, EPA has assessed the collective impact of all of the revisions being finalized. The direct final revisions rule includes increases to 2014 SO<sub>2</sub> budgets for Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina. For the direct final revisions rule, EPA has assessed the emission increases on a state-by-state basis, as well as collectively, for the remedy scenario, the \$500/ton cost threshold scenario, and the \$2,300/ton cost threshold scenario.

For purposes of assessing the impact of state SO<sub>2</sub> budget increases under the final revisions rule and the direct final revisions rule in AQAT, EPA assumed that the state SO<sub>2</sub> budget increases would result in an equivalent, ton for ton, increase in 2014 SO<sub>2</sub> emissions (beyond the level previously projected in the final Transport Rule). Therefore, this TSD refers to the “final emission increases” assumed to result from the final budget increases and analyzes the impact of these emission increases.

This TSD is organized as follows:

- A. Summary of EPA's Analysis to Quantify Emissions that Significantly Contribute to Nonattainment or Interfere with Maintenance for the Final Revisions Rule and Direct Final Revisions Rule.
- B. Analysis of Significant Contribution and Interference with Maintenance for SO<sub>2</sub> Emissions from Texas, New York, and Wisconsin Using the Air Quality Assessment Tool (AQAT) for the Final Revisions Rule.
- C. Presentation of Annual and Ozone-Season NO<sub>x</sub> Emission Increases Relative to Annual and Ozone-Season Total NO<sub>x</sub> Emissions for the Final Revisions Rule.
- D. Analysis of Significant Contribution and Interference with Maintenance for SO<sub>2</sub> Emissions from Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina (on a State-by-State Basis as well as Collectively) Using AQAT for the Direct Final Rule.
- E. Presentation of Annual and Ozone-Season NO<sub>x</sub> Emission Increases Relative to Annual and Ozone-Season Total NO<sub>x</sub> Emissions for the Direct Final Rule.

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<sup>1</sup> See preamble to the “Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone”

<sup>2</sup> See preamble to the “Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone: Part II”

A. Summary of EPA's Analysis to Quantify Emissions that Significantly Contribute to Nonattainment or Interfere with Maintenance for the Final Revisions Rule and Direct Final Revisions Rule.

Sections V and VI of the final Transport Rule (TR) preamble (Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (August 8, 2011)) describe EPA's approach to identify upwind states' emissions that significantly contribute to downwind nonattainment or interfere with downwind maintenance of the 1997 and 2006 fine particle (PM<sub>2.5</sub>) National Ambient Air Quality Standard (NAAQS) and the 1997 ozone NAAQS. This is further described in the related Significant Contribution and State Emissions Budgets Final Rule TSD (EPA-HQ-OAR-2009-0491-4456). As described in the preamble for the final TR, the approach uses air quality modeling to identify monitoring sites with projected nonattainment and maintenance problems (receptors) for the PM<sub>2.5</sub> and ozone NAAQS as well as upwind states whose contributions to these receptors meet or exceed specified threshold amounts. See sections V.C and V.D in the TR preamble and the associated TR Air Quality Modeling Final Rule TSD (EPA-HQ-OAR-2009-0491-4140) for a detailed discussion of these air quality analyses.

As described in TR preamble section VI, after identifying upwind-to-downwind linkages, EPA uses a multi-step process to quantify each state's significant contribution to nonattainment and interference with maintenance. First, EPA identifies the power sector emissions projected to remain at ascending cost thresholds of emissions reductions for each state. See section B in the Significant Contribution and State Emissions Budgets Final Rule TSD for discussion of this analysis. Next, EPA uses an AQAT to estimate the air quality impact of the upwind emission reductions at each cost threshold on downwind receptors with problems attaining and maintaining the applicable NAAQS. See section C in the Significant Contribution and State Emissions Budgets Final Rule TSD for discussion of the development and use of AQAT.

The analysis in this TSD uses the annual PM2.5 and 24-hour PM2.5 AQAT to estimate the impacts of the final SO<sub>2</sub> emission increases on downwind air quality in the context of the air quality component of the determination of significant contribution in 2014; it also provides an estimate of the effect of these final SO<sub>2</sub> budget revisions on the "remedy" control scenario analyzed for the final Transport Rule in 2014. For the final revisions rule, the final budget increases were investigated in a collective manner to show the estimated air quality impacts from all of the state's emissions following the finalization of the revisions rule on the downwind monitors. For the direct final rule, the emission increases for each state were examined independently of the emission changes from other states, as well as collectively, where emissions for all affected states are assumed to increase simultaneously. For each of the two rules, two assessments were performed:

- Significant Contribution Assessment: Following the methodology and using the emissions for the air quality assessment of significant contribution and interference with maintenance from the final TR, we assess whether the SO<sub>2</sub> emission increases have the potential to change the patterns of attainment, nonattainment, and maintenance projected at the \$500/ton and \$2,300/ton cost threshold levels for annual PM2.5 and for 24-hour PM2.5 in 2014 (compared with the AQAT analysis from the

- final TR). Specifically, we investigate if each state's significant contribution and interference with maintenance is resolved at \$500/ton and/or \$2,300/ton to the receptor(s) to which they are linked (as was concluded in the multi-factor assessment for the final TR). For each cost threshold level analyzed, on a receptor-by-receptor basis, the emissions reductions for each upwind state are associated with one of two cost threshold levels (either the 2014 base case emissions level or the particular threshold cost level being analyzed) depending on whether the upwind state is "linked" to that receptor or if the receptor is located within the state. States that are contributing above the respective air quality threshold (i.e., greater than or equal to 1 percent contribution of total sulfate and nitrate for the annual and 24-hour PM2.5 to the monitor), as well as the state containing the monitor, make SO<sub>2</sub> emissions reductions available at the particular cost threshold level. The emissions for all other states are at the 2014 base case level.
- "Remedy" Control Scenario Assessment: In this case, we estimate the resulting air quality and patterns of attainment, nonattainment, and maintenance when the emissions from all states are at the level from the 2014 remedy control scenario (regardless of whether or not they are linked to a particular receptor). Emissions are at the level for the final TR remedy control scenario except for emissions from the states affected by the final revisions rule or the direct final rule, where their emissions are increased by the amount of the related revisions.

For the final revisions rule, this analysis reaches the same conclusion as EPA's assessment of significant contribution to nonattainment and interference with maintenance from the final TR. There are no estimated changes in the patterns of attainment, nonattainment, and maintenance at the \$500/ton cost threshold level for any receptors linked to Texas, New York, or Wisconsin. Therefore, Texas' significant contribution and interference with maintenance is the amount of emissions that can be removed at the \$500/ton cost threshold. Furthermore, there are no estimated changes in the patterns of attainment, nonattainment, and maintenance at the \$2,300/ton cost threshold level for any receptors linked to New York or Wisconsin (relative to the analysis from the final TR). Thus, EPA concludes that for these two states, their significant contribution and interference with maintenance is the amount of emissions that can be removed at the \$2,300/ton cost threshold. In addition, there are no estimated changes in the patterns of attainment, nonattainment, and maintenance in the 2014 "remedy" control scenario for any of the final individual emission changes for Texas, New York, or Wisconsin.

EPA concludes that the SO<sub>2</sub> emission budget increases in the final revisions rule would not substantially affect the air quality component of the multifactor test and, thus, would not affect EPA's conclusions in the final TR identifying \$2,300/ton and \$500/ton as the appropriate SO<sub>2</sub> cost thresholds for "Group 1" and "Group 2" states, respectively.

EPA also conducted AQAT significant contribution and remedy assessments of the SO<sub>2</sub> budget increases in 2014 for the direct final rule. EPA assessed emission changes for Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina. EPA examined these estimated emission increases on a state-by-state basis, where the emission adjustment was assessed for each state independently of the emission adjustments for the other states, as well as collectively, where all states affected by the direct final simultaneously increased emissions. The emissions from the final revisions rule are included in the direct final assessment (i.e., the direct final emissions are added incrementally to the emissions assessed for the final revisions rule).

For the direct final rule, in addition to the state-by-state and case-by-case analysis presented in this TSD, EPA also assessed the cumulative air quality impacts in the \$500/ton cost threshold and \$2300/ton cost threshold as well as on the 2014 “remedy” control scenario. For these scenarios, we assumed that all states (Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina), simultaneously, were to make the final emission increases outlined in the direct final rule. While there were small changes in concentrations at some receptors, there were no changes in the patterns of attainment, nonattainment, and maintenance for either of the two cost threshold scenarios or for the 2014 “remedy” control scenario.

Based on the results of the analyses presented in this TSD, EPA concludes that the final SO<sub>2</sub> emission budget increases in the direct final rule (added incrementally to the final revisions rule emissions) would not substantially affect the air quality component of the multifactor test and thus would not affect EPA’s conclusions in the final TR identifying \$2,300/ton and \$500/ton as the appropriate SO<sub>2</sub> cost thresholds for “Group 1” and “Group 2” states, respectively, and would not change each state’s designation as either “Group 1” or “Group 2” as was made in the final TR.

#### B. Analysis of Significant Contribution and Interference with Maintenance for SO<sub>2</sub> Emissions from Texas, New York, and Wisconsin Using the Air Quality Assessment Tool (AQAT) for the Final Revisions Rule.

Using the calibrated annual PM2.5 and 24-hour PM2.5 versions of AQAT (as described in section C of the Significant Contribution and State Emissions Budgets Final Rule TSD), EPA examined the air quality impacts to receptors in 2014 using the 2014 base case and 2014 \$500/ton and \$2,300/ton cost threshold emission estimates. This analysis directly follows the methodology of the same analysis conducted for the final TR cost threshold analysis. Appendix A of this document lists a number of the AQAT input and output workbooks from the TR that were used in this assessment as well as a number of additional AQAT input, intermediate, and output workbooks created specifically for this assessment. Appendix A also lists some abbreviations, used throughout the excel workbooks, which identify specific AQAT simulations used in this assessment.

The fossil and biomass SO<sub>2</sub> emissions for each state modeled in the 2012 base case CAMx source-apportionment air quality modeling are shown in Table 1 for each of the cases for the final revisions rule that were investigated using AQAT. Note that the emissions for each of the states whose 2014 SO<sub>2</sub> budget is not affected by the final revisions rule are unchanged from the respective emissions level from the July 2011 final TR analysis, while the emissions for Texas, New York, and Wisconsin are assessed at their emissions level from the final TR (for comparison) and at an increased level accounting for their budget increases contained in the final revisions rule. Consequently, for comparison with the final TR, for each assessment scenario, we present the resulting estimates from the final TR analysis along with the resulting estimates where the emissions from Texas, New York, and Wisconsin have been increased..

Two cost threshold levels (\$500/ton and \$2,300/ton) were investigated in the Significant Contribution Assessment, the appropriate cost threshold for “Group 2” states and the cost threshold for “Group 1” states, respectively, as determined in the final TR. Following the analysis of these cost threshold levels with the adjustments in SO<sub>2</sub> emissions made for Texas, New York, and Wisconsin, there were small changes in estimated average and maximum design values, and no additional nonattainment/maintenance areas were present compared with those

areas identified at \$500/ton and \$2,300/ton in the final TR AQAT assessments for both annual PM2.5 and 24-hour PM2.5 (see the Significant Contribution and State Emissions Budgets Final Rule TSD for discussion of this analysis). See Tables 2 and 3 for estimated average and maximum design values for annual PM2.5 and Tables 4 and 5 for average and maximum design values for 24-hour PM2.5.

For the significant contribution assessment, minor changes in estimated concentrations were seen at the receptors to which Texas, New York, and Wisconsin were “linked”. The monitor for annual PM2.5 to which Texas was linked in the TR was: 171191007. The monitors for 24-hour PM2.5 to which New York was linked in the TR were: 261470005; 261610008; 261630016; 261630019; 261630033; 390350045; 390350060; 390350065; 420710007; and 421330008. The monitors for annual PM2.5 to which New York was linked in the TR were: 390350038; 390350045; 390350060; 390350065; and 420030064. The receptors for 24-hour PM2.5 to which Wisconsin was linked<sup>3</sup> in the TR were: 170310052, 170311016, 170312001, 170313301, 170316005, 180890022, 180890026, 261630019, 261630033, 550790010, 550790026, 550790043. The receptors for annual PM2.5 to which Wisconsin was linked in the TR were: 171191007, 180970081, 180970083, 261630033, 390350038, 390350045, 390350060, 390350065, 390610014, 390617001, and 390618001. The resulting changes in concentration at these receptors were not sufficient to alter the conclusions about the status of these receptors at the \$500/ton or \$2,300/ton cost threshold levels in 2014. Thus, EPA concludes that assessment of alternative cost threshold levels were unnecessary. Texas maintains its classification as a “Group 2” state, and New York and Wisconsin maintain their classifications as “Group 1” states.

As described previously, using AQAT, EPA also assessed how the SO<sub>2</sub> emission levels in the final revisions rule, collectively, for Texas, New York, and Wisconsin impact the patterns of attainment, nonattainment, and maintenance areas for the 2014 TR “remedy” control scenario, EPA found that, while there were small changes in average and maximum design values, the patterns were not likely to change. Areas were projected to retain the same attainment status as estimated in the TR using AQAT.

#### C. Presentation of Annual and Ozone-Season NO<sub>x</sub> Emission Increases Relative to Annual and Ozone-Season Total NO<sub>x</sub> Emissions for the Final Revisions Rule.

The final revisions to state budgets for annual and ozone-season NO<sub>x</sub> represent very limited shares of the total NO<sub>x</sub> emissions from all source-sectors in each affected state, as modeled in the air quality projections under the final Transport Rule “remedy” control scenario analysis in 2014. Tables 6 and 7 illustrate the relationship of the final state budget revisions to each state’s total emissions (from all sources) for annual NO<sub>x</sub> and ozone-season NO<sub>x</sub>, respectively. See the excel workbook “EmissionsSummaries\_TR\_remedyNOx\_OS.xlsx” for the ozone-season emission summary for the 2014 remedy control scenario for NOx. See the excel workbook “TransportRuleFinal\_EmissionsSummaries”, EPA-HQ-OAR-2009-0491-4206, for the 2014 remedy control scenario for annual NOx. See the Emissions Inventory Final Rule Technical Support Document (TSD), EPA-HQ-OAR-2009-0491-4522, for additional details about the emissions inventories. The final state budget revisions represent small percentages of each state’s total emissions; therefore, EPA believes that the impact of these revisions would be limited to comparatively small changes to the 2014 ozone design values projected in the final Transport Rule air quality analysis.

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<sup>3</sup> We have included receptors located in Wisconsin in the following lists of receptors.

D. Analysis of Significant Contribution and Interference with Maintenance for SO<sub>2</sub> Emissions from Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina (on a State-by-State Basis as well as Collectively) Using AQAT for the Direct Final Rule.

EPA assessed the impacts of the SO<sub>2</sub> budget changes in the direct final rule on a state-by-state basis, as well as collectively. The total budget changes are presented in Table 8 (see the preamble of the direct final rule for details about the emission changes). The states that EPA investigated were Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina. The budget changes were assessed using the 2014 \$500/ton and \$2,300 cost threshold scenarios and the “remedy” control emissions scenario. All of these scenarios included the emission increases from the final revisions rule. Note that the 2014 base case emissions were also used and that, for this case, EPA assumed no emission increases would be made to account for the final revisions rule.

As described in section A, EPA performed two assessments, a Significant Contribution Assessment and a “Remedy” Control Scenario Assessment. For each scenario for the two assessments, for comparison to see the affect of the emissions in the direct final revision rule, EPA also presents the results of the AQAT assessment from the final revisions rule.

Georgia: Georgia was “linked” to the 24-hour PM2.5 receptors 10730023 and 10732003 in Jefferson County, Alabama and to the same receptors for annual PM2.5. There is also a receptor located in Georgia, identification number 131210039. As seen in Tables 9 and 10 for annual PM2.5 average and maximum design values and for Tables 11 and 12 for 24-hour PM2.5 average and maximum design values, the resulting change in concentration at these receptors was not sufficient to alter the conclusions about the status of these receptors (i.e., estimated to be in attainment, maintenance, or nonattainment) at the \$500/ton or \$2,300/ton cost threshold levels in 2014. EPA concludes that assessment of alternative cost threshold levels were unnecessary, and Georgia maintains its classification as a “Group 2” state. Similarly, under the remedy assessment, the estimated patterns of attainment, maintenance, and nonattainment were unchanged relative to the final TR assessment (including the final revisions rule).

Indiana: Indiana contributed above the threshold to all 24-hour PM2.5 receptors with base case maximum design values greater than or equal to 35.5 µg/m<sup>3</sup> (except for receptor 420710007 in Lancaster County, Pennsylvania). Indiana also contributed at or above the threshold to all of the annual PM2.5 receptors with 2012 base case design values greater than or equal to 12.05 µg/m<sup>3</sup>. As seen in Tables 13 and 14 for annual PM2.5 average and maximum design values and for Tables 15 and 16 for 24-hour PM2.5 average and maximum design values, the resulting change in concentration at these receptors was not sufficient to alter the conclusions about the status of these receptors (i.e., estimated to be in attainment, maintenance, or nonattainment) at the \$500/ton or \$2,300/ton cost threshold levels in 2014. EPA concludes that assessment of alternative cost threshold levels were unnecessary, and Indiana maintains its classification as a “Group 1” state. Similarly, under the remedy assessment, the estimated patterns of attainment, maintenance, and nonattainment were unchanged relative to the final TR assessment (including the final revisions rule).

Kansas: Kansas 24-hour PM2.5 receptors identification numbers 550790010, 550790026, 171191007, 170316005, and 170310052 in Wisconsin and Illinois. Kansas did not contribute to any of the annual PM2.5 receptors with 2012 base case design values greater than or equal to 12.05 µg/m<sup>3</sup>. As seen in Tables 17 and 18 for annual PM2.5 average and maximum design values and for Tables 19 and 20 for 24-hour PM2.5 average and maximum design values, the resulting change in concentration at these receptors was not sufficient to alter the conclusions

about the status of these receptors (i.e., estimated to be in attainment, maintenance, or nonattainment) at the \$500/ton or \$2,300/ton cost threshold levels in 2014. EPA concludes that assessment of alternative cost threshold levels were unnecessary, and Kansas maintains its classification as a “Group 2” state. Similarly, under the remedy assessment, the estimated patterns of attainment, maintenance, and nonattainment were unchanged relative to the final TR assessment (including the final revisions rule).

Nebraska: Nebraska 24-hour PM2.5 receptors 550790010 and 550790026 in Wisconsin. Nebraska did not contribute to any of the annual PM2.5 receptors with 2012 base case design values greater than or equal to  $12.05 \mu\text{g}/\text{m}^3$ . As seen in Tables 21 and 22 for annual PM2.5 average and maximum design values and for Tables 23 and 24 for 24-hour PM2.5 average and maximum design values, the resulting change in concentration at these receptors was not sufficient to alter the conclusions about the status of these receptors (i.e., estimated to be in attainment, maintenance, or nonattainment) at the \$500/ton or \$2,300/ton cost threshold levels in 2014. EPA concludes that assessment of alternative cost threshold levels were unnecessary, and Nebraska maintains its classification as a “Group 2” state. Similarly, under the remedy assessment, the estimated patterns of attainment, maintenance, and nonattainment were unchanged relative to the final TR assessment (including the final revisions rule).

New York: The monitors for 24-hour PM2.5 to which New York was linked in the TR were: 261470005; 261610008; 261630016; 261630019; 261630033; 390350045; 390350060; 390350065; 420710007; and 421330008. The monitors for annual PM2.5 to which New York was linked in the TR were: 390350038; 390350045; 390350060; 390350065; and 420030064. As seen in Tables 25 and 26 for annual PM2.5 average and maximum design values and for Tables 27 and 28 for 24-hour PM2.5 average and maximum design values, the resulting change in concentration at these receptors was not sufficient to alter the conclusions about the status of these receptors (i.e., estimated to be in attainment, maintenance, or nonattainment) at the \$500/ton or \$2,300/ton cost threshold levels in 2014. EPA concludes that assessment of alternative cost threshold levels were unnecessary, and New York maintains its classification as a “Group 1” state. Similarly, under the remedy assessment, the estimated patterns of attainment, maintenance, and nonattainment were unchanged relative to the final TR assessment (including the final revisions rule).

Ohio: Ohio contributed above the threshold to all 24-hour PM2.5 receptors with base case maximum design values greater than or equal to  $35.5 \mu\text{g}/\text{m}^3$ . Ohio also contributed at or above the threshold to all of the annual PM2.5 receptors with 2012 base case design values greater than or equal to  $12.05 \mu\text{g}/\text{m}^3$ . As seen in Tables 29 and 30 for annual PM2.5 average and maximum design values and for Tables 31 and 32 for 24-hour PM2.5 average and maximum design values, the resulting change in concentration at these receptors was not sufficient to alter the conclusions about the status of these receptors (i.e., estimated to be in attainment, maintenance, or nonattainment) at the \$500/ton or \$2,300/ton cost threshold levels in 2014. EPA concludes that assessment of alternative cost threshold levels were unnecessary, and Ohio maintains its classification as a “Group 1” state. Similarly, under the remedy assessment, the estimated patterns of attainment, maintenance, and nonattainment were unchanged relative to the final TR assessment (including the final revisions rule).

South Carolina: South Carolina did not contribute above the threshold to any of the 24-hour PM2.5 receptors identified in the TR (i.e., it was not “linked”). Thus, its emissions were assessed using 2014 base case emission levels for all receptors, and consequently, no changes in concentration were observed in 24-hour PM2.5 at any of the receptors at the \$500/ton or

\$2,300/ton cost threshold levels in 2014 (relative to the TR including the final revisions rule). For annual PM2.5, South Carolina was “linked” to receptor 131210039 in Fulton County, Georgia. As seen in Tables 33 and 34 for annual PM2.5 average and maximum design values and for Tables 35 and 36 for 24-hour PM2.5 average and maximum design values, the resulting change in concentration at these receptors was not sufficient to alter the conclusions about the status of these receptors (i.e., estimated to be in attainment, maintenance, or nonattainment) at the \$500/ton or \$2,300/ton cost threshold levels in 2014. EPA concludes that assessment of alternative cost threshold levels were unnecessary, and South Carolina maintains its classification as a “Group 2” state. Similarly, under the remedy assessment, the estimated patterns of attainment, maintenance, and nonattainment were unchanged relative to the final TR assessment (including the final revisions rule).

Collective Assessment: As described above, EPA also used AQAT to estimate the air quality impacts in the significant contribution and remedy assessments when all states included in the direct final simultaneously increased their emissions. As seen in Tables 37 and 38 for annual PM2.5 average and maximum design values and for Tables 39 and 40 for 24-hour PM2.5 average and maximum design values, the resulting change in concentration at each of the TR receptors was not sufficient to alter the conclusions about its status (i.e., estimated to be in attainment, maintenance, or nonattainment) at the \$500/ton or \$2,300/ton cost threshold levels in 2014. Similarly, under the remedy assessment, the estimated patterns of attainment, maintenance, and nonattainment were unchanged relative to the final TR assessment (including the final revisions rule).

#### E. Presentation of Annual and Ozone-Season NO<sub>x</sub> Emission Increases Relative to Annual and Ozone-Season Total NO<sub>x</sub> Emissions for the Direct Final Rule.

The direct final rule revises the state budgets for annual and ozone-season NO<sub>x</sub>. These changes represent very limited shares of the total NO<sub>x</sub> emissions from all source-sectors in each affected state, as modeled in the air quality projections under the final Transport Rule “remedy” control scenario analysis in 2014, and very limited shares of the total NO<sub>x</sub> emissions from all source-sectors in each affected state (when the final revisions rule is also considered). See the excel workbook “EmissionsSummaries\_TR\_remedyNOx\_OS.xlsx” for the ozone-season emission summary for the 2014 remedy control scenario for NO<sub>x</sub>. See the excel workbook “TransportRuleFinal\_EmissionsSummaries”, EPA-HQ-OAR-2009-0491-4206, for the 2014 remedy control scenario for annual NO<sub>x</sub>. See the Emissions Inventory Final Rule Technical Support Document (TSD), EPA-HQ-OAR-2009-0491-4522, for additional details about the emissions inventories.

Tables 41 and 42 illustrate the relationship of the direct final state budget revisions to each state’s total emissions (from all sources) for annual NO<sub>x</sub> and ozone-season NO<sub>x</sub> respectively. The total emissions include the NO<sub>x</sub> from the final revisions rule (assuming that there is a one-to-one correlation between the budget increase and an increase in emissions. The state budget revisions in the direct final rule represent small percentages of each state’s total emissions; therefore, EPA believes that the impact of these revisions would be limited to comparatively small changes to the 2014 ozone design values projected in the final Transport Rule air quality analysis.

Table 1. SO<sub>2</sub> EGU Emissions From Fossil and Biomass Units\* Used in AQAT (tons of SO<sub>2</sub>) in 2014 in the Final TR as well as the Additional Emission Increases Examined in the Revisions Proposal.

	<b>2014 Base Case</b>	\$500/ton Cost Threshold	\$2,300/ton Cost Threshold	“Remedy” Control Scenario	Emission Increase Examined in AQAT
<b>State</b>					
Alabama	417,340	200,905	213,593	173,566	
Arkansas	99,411	103,431	103,431	106,685	
Connecticut	3,774	3,883	3,883	3,883	
Delaware	2,172	2,088	2,088	2,172	
District of Columbia	0	0	0	0	
Florida	143,601	137,705	136,825	148,069	
Georgia	170,288	94,691	95,834	93,208	
Illinois	141,606	138,815	128,997	132,647	
Indiana	727,786	262,386	179,539	195,045	
Iowa	133,083	117,830	81,137	83,827	
Kansas	69,819	55,308	60,870	45,740	
Kentucky	488,006	160,582	106,299	116,927	
Louisiana	118,231	135,803	139,204	139,204	
Maine	2,355	2,355	2,355	2,355	
Maryland	42,926	32,187	28,203	30,368	
Massachusetts	13,365	13,364	13,363	13,363	
Michigan	269,434	210,163	148,232	162,632	
Minnesota	70,937	47,720	50,213	49,622	
Mississippi	30,972	32,454	32,455	32,109	
Missouri	390,287	221,689	175,480	186,898	
Nebraska	73,073	69,466	71,475	71,340	
New Hampshire	6,453	7,100	7,199	6,742	
New Jersey	38,857	7,069	6,611	6,243	
<b>New York</b>	<b>42,887</b>	<b>23,181</b>	<b>14,404</b>	<b>15,160</b>	<b>3,527</b>
North Carolina	126,048	109,612	63,577	69,377	
North Dakota	103,633	102,816	103,633	103,624	
Ohio	851,199	313,193	166,691	178,975	
Oklahoma	137,981	137,981	138,072	138,072	
Pennsylvania	509,650	296,596	114,431	125,545	
Rhode Island	0	0	0	0	
South Carolina	213,281	96,504	107,114	100,787	
South Dakota	29,711	29,711	29,711	29,711	
Tennessee	284,468	82,159	58,838	64,721	
<b>Texas</b>	<b>453,332</b>	<b>281,298</b>	<b>284,132</b>	<b>266,648</b>	<b>50,517</b>
Vermont	263	263	263	263	
Virginia	77,256	71,505	47,639	51,144	
West Virginia	498,507	158,445	76,778	84,344	
<b>Wisconsin</b>	<b>130,538</b>	<b>57,418</b>	<b>46,205</b>	<b>50,136</b>	<b>7,757</b>

\*Source: Integrated Planning Model run by EPA, 2011. See Appendix A in the TR Significant Contribution and State Emissions Budgets Final Rule TSD for list and description of the IPM \$500/ton and \$2,300/ton cost threshold and control scenario IPM runs. Emissions are shown for all fossil and biomass units. These “final cost curve” runs have NO<sub>x</sub> and ozone season NO<sub>x</sub> cost thresholds at \$500/ton (all years), SO<sub>2</sub> Group 2 at \$500/ton (all years), and SO<sub>2</sub> Group 1 (2012-2013) at \$500/ton.

Table 2. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT – Considering Additional Texas, New York, and Wisconsin Emissions from the Final Revisions Rule.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).								
				\$500/ton Without TX, NY, and WI Budget Increase	\$500/ton With TX, NY, and WI Budget Increase	\$2,300/ton Without TX, NY, and WI Budget Increase	\$2,300/ton With TX, NY, and WI Budget Increase	Control Scenario Without TX, NY, and WI Budget Increase				
<b>Additional Emissions Added to Texas (tons)</b>				0	50,517	0	50,517	0	50,517			
<b>Additional Emissions Added to New York (tons)</b>				0	3,527	0	3,527	0	3,527			
<b>Additional Emissions Added to Wisconsin (tons)</b>				0	7,757	0	7,757	0	7,757			
420030064	Pennsylvania	Allegheny	17.94	15.78	15.78	15.03	15.03	14.86	14.87			
390350038	Ohio	Cuyahoga	15.99	14.10	14.10	13.60	13.60	13.51	13.52			
10730023	Alabama	Jefferson	16.15	14.33	14.33	14.31	14.31	13.89	13.90			
390618001	Ohio	Hamilton	16.01	13.54	13.55	13.01	13.01	12.96	12.97			
261630033	Michigan	Wayne	15.73	14.35	14.36	13.87	13.87	13.77	13.78			
390350060	Ohio	Cuyahoga	15.67	13.75	13.76	13.25	13.25	13.16	13.16			
390610014	Ohio	Hamilton	15.76	13.29	13.29	12.75	12.75	12.70	12.71			
390610042	Ohio	Hamilton	15.40	12.97	12.97	12.44	12.44	12.36	12.37			
171191007	Illinois	Madison	15.46	13.83	13.85	13.56	13.57	13.39	13.40			
10732003	Alabama	Jefferson	15.16	13.55	13.55	13.52	13.52	13.13	13.13			
390350045	Ohio	Cuyahoga	15.14	13.23	13.24	12.73	12.73	12.64	12.65			
180970081	Indiana	Marion	14.86	12.68	12.69	12.26	12.27	12.24	12.25			
131210039	Georgia	Fulton	15.07	13.35	13.35	13.20	13.20	13.07	13.08			
390617001	Ohio	Hamilton	14.74	12.30	12.30	11.76	11.76	11.71	11.72			
390350065	Ohio	Cuyahoga	14.67	12.79	12.79	12.28	12.28	12.19	12.20			
180970083	Indiana	Marion	14.71	12.53	12.54	12.11	12.12	12.09	12.10			

\*Monitors are in order of decreasing 2012 base case Maximum DV.

Table 3. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT – Considering Additional Texas, New York, and Wisconsin Emissions from the Final Revisions Rule.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).								
				\$500/ton Without TX, NY, and WI Budget Increase	\$500/ton With TX, NY, and WI Budget Increase	\$2,300/ton Without TX, NY, and WI Budget Increase	\$2,300/ton With TX, NY, and WI Budget Increase	Control Scenario Without TX, NY, and WI Budget Increase				
<b>Additional Emissions Added to Texas (tons)</b>				0	50,517	0	50,517	0	50,517			
<b>Additional Emissions Added to New York (tons)</b>				0	3,527	0	3,527	0	3,527			
<b>Additional Emissions Added to Wisconsin (tons)</b>				0	7,757	0	7,757	0	7,757			
420030064	Pennsylvania	Allegheny	18.33	16.17	16.17	15.42	15.42	15.25	15.26			
390350038	Ohio	Cuyahoga	16.66	14.77	14.77	14.27	14.27	14.18	14.19			
10730023	Alabama	Jefferson	16.46	14.64	14.64	14.62	14.62	14.20	14.21			
390618001	Ohio	Hamilton	16.33	13.86	13.87	13.33	13.33	13.28	13.29			
261630033	Michigan	Wayne	16.32	14.94	14.95	14.46	14.46	14.36	14.37			
390350060	Ohio	Cuyahoga	16.18	14.26	14.27	13.76	13.76	13.67	13.67			
390610014	Ohio	Hamilton	15.98	13.51	13.51	12.97	12.97	12.92	12.93			
390610042	Ohio	Hamilton	15.77	13.34	13.34	12.81	12.81	12.73	12.74			
171191007	Illinois	Madison	15.73	14.10	14.12	13.83	13.84	13.66	13.67			
10732003	Alabama	Jefferson	15.64	14.03	14.03	14.00	14.00	13.61	13.61			
390350045	Ohio	Cuyahoga	15.61	13.70	13.71	13.20	13.20	13.11	13.12			
180970081	Indiana	Marion	15.16	12.98	12.99	12.56	12.57	12.54	12.55			
131210039	Georgia	Fulton	15.10	13.38	13.38	13.23	13.23	13.10	13.11			
390617001	Ohio	Hamilton	15.10	12.66	12.66	12.12	12.12	12.07	12.08			
390350065	Ohio	Cuyahoga	15.10	13.22	13.22	12.71	12.71	12.62	12.63			
180970083	Indiana	Marion	15.06	12.88	12.89	12.46	12.47	12.44	12.45			

\*Monitors are in order of decreasing 2012 base case Maximum DV.

Table 4. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT – Considering Additional Texas, New York, and Wisconsin Emissions from the Final Revisions Rule.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ )								
				\$500/ton Without TX, NY, and WI Budget Increase	\$500/ton With TX, NY, and WI Budget Increase	\$2,300/ton Without TX, NY, and WI Budget Increase	\$2,300/ton With TX, NY, and WI Budget Increase	Control Scenario Without TX, NY, and WI Budget Increase	Control Scenario With TX, NY, and WI Budget Increase			
<b>Additional Emissions Added to Texas (tons)</b>				0	50,517	0	50,517	0	50,517			
<b>Additional Emissions Added to New York (tons)</b>				0	3,527	0	3,527	0	3,527			
<b>Additional Emissions Added to Wisconsin (tons)</b>				0	7,757	0	7,757	0	7,757			
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.57	45.54	45.54	45.45	45.46			
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.19	30.25	30.25	29.88	29.88			
390350038**	Ohio	Cuyahoga	39.46	34.18	34.18	33.51	33.51	33.46	33.47			
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.93	33.88	33.88			
390350060	Ohio	Cuyahoga	37.78	31.50	31.50	30.60	30.61	30.51	30.51			
170311016**	Illinois	Cook	37.58	34.13	34.14	33.13	33.14	32.95	32.97			
261630033**	Michigan	Wayne	39.48	36.31	36.32	35.00	35.01	34.74	34.76			
180890022**	Indiana	Lake	34.94	32.79	32.80	32.38	32.39	32.31	32.31			
540090011	West Virginia	Brooke	37.57	30.60	30.60	29.07	29.07	28.83	28.84			
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87	34.87			
390350045	Ohio	Cuyahoga	34.80	27.69	27.69	26.30	26.30	26.23	26.24			
390811001	Ohio	Jefferson	34.56	27.64	27.64	25.79	25.79	25.57	25.57			
261630019**	Michigan	Wayne	37.34	35.27	35.28	34.93	34.93	34.87	34.88			
390350065	Ohio	Cuyahoga	34.91	27.65	27.66	26.11	26.11	25.95	25.96			
170313301	Illinois	Cook	34.97	31.11	31.11	30.54	30.54	30.35	30.36			
420070014	Pennsylvania	Beaver	36.21	29.28	29.28	27.59	27.59	27.39	27.40			
420033007	Pennsylvania	Allegheny	32.40	26.27	26.27	24.88	24.88	24.78	24.78			
010730023	Alabama	Jefferson	36.96	31.93	31.93	31.61	31.61	31.10	31.11			
550790026	Wisconsin	Milwaukee	33.62	30.48	30.51	30.15	30.18	30.08	30.11			
180970043	Indiana	Marion	35.76	28.64	28.64	27.16	27.16	27.13	27.14			
261470005	Michigan	St Clair	36.23	33.35	33.35	32.78	32.78	32.67	32.68			
550790043	Wisconsin	Milwaukee	36.21	32.49	32.53	31.85	31.89	31.80	31.84			
180890026	Indiana	Lake	34.08	30.91	30.91	30.52	30.52	30.49	30.49			
180970081	Indiana	Marion	35.85	28.44	28.44	27.35	27.35	27.30	27.30			
180970066	Indiana	Marion	35.73	29.22	29.22	28.13	28.13	28.10	28.10			
171191007	Illinois	Madison	36.59	29.92	29.94	29.32	29.34	29.32	29.34			
550790010	Wisconsin	Milwaukee	35.47	31.50	31.54	30.82	30.86	30.83	30.86			
390170003	Ohio	Butler	34.40	28.07	28.07	26.49	26.49	26.47	26.48			
170316005	Illinois	Cook	34.12	32.72	32.72	32.41	32.41	32.02	32.04			
420031008	Pennsylvania	Allegheny	35.04	26.95	26.95	24.69	24.69	24.47	24.49			
261610008	Michigan	Washtenaw	35.05	29.40	29.40	28.54	28.55	28.47	28.47			
170312001	Illinois	Cook	33.62	29.84	29.85	29.58	29.58	29.50	29.51			
170310052	Illinois	Cook	34.94	30.11	30.12	29.78	29.79	29.69	29.70			
421330008	Pennsylvania	York	33.38	31.60	31.60	31.03	31.03	30.92	30.93			
261630015	Michigan	Wayne	35.55	32.23	32.23	31.10	31.10	31.02	31.02			
010732003	Alabama	Jefferson	35.31	31.42	31.42	31.10	31.10	30.62	30.63			
390618001	Ohio	Hamilton	35.29	27.63	27.63	26.11	26.11	25.96	25.97			
171190023	Illinois	Madison	35.11	29.23	29.23	28.49	28.49	28.41	28.43			
420031301	Pennsylvania	Allegheny	33.95	27.16	27.16	25.21	25.21	24.96	24.97			
391130032	Ohio	Montgomery	33.68	24.40	24.40	23.15	23.15	23.09	23.10			
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.13	26.14			

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

Table 5. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT – Considering Additional Texas, New York, and Wisconsin Emissions from the Final Revisions Rule.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without TX, NY, and WI Budget Increase	\$500/ton With TX, NY, and WI Budget Increase	\$2,300/ton Without TX, NY, and WI Budget Increase	\$2,300/ton With TX, NY, and WI Budget Increase	Control Scenario Without TX, NY, and WI Budget Increase	Control Scenario With TX, NY, and WI Budget Increase
<b>Additional Emissions Added to Texas (tons)</b>				0	50,517	0	50,517	0	50,517
<b>Additional Emissions Added to New York (tons)</b>				0	3,527	0	3,527	0	3,527
<b>Additional Emissions Added to Wisconsin (tons)</b>				0	7,757	0	7,757	0	7,757
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.72	48.63	48.63	48.52	48.53
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.85	34.80	34.80	34.28	34.29
390350038**	Ohio	Cuyahoga	41.84	35.93	35.93	35.41	35.41	35.39	35.39
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.65	35.66	35.61	35.61
390350060	Ohio	Cuyahoga	40.85	33.69	33.70	33.04	33.04	32.94	32.95
170311016**	Illinois	Cook	40.44	37.40	37.41	36.54	36.55	36.40	36.41
261630033**	Michigan	Wayne	39.81	36.59	36.59	35.23	35.23	34.95	34.97
180890022**	Indiana	Lake	39.58	37.00	37.01	36.51	36.51	36.30	36.31
540090011	West Virginia	Brooke	38.39	32.23	32.23	30.02	30.02	29.63	29.64
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.48	29.49	27.60	27.60	27.43	27.44
390811001	Ohio	Jefferson	37.88	30.27	30.27	28.03	28.03	27.76	27.76
261630019**	Michigan	Wayne	37.83	36.20	36.21	35.83	35.83	35.74	35.75
390350065	Ohio	Cuyahoga	37.67	28.79	28.80	27.00	27.00	26.81	26.82
170313301	Illinois	Cook	37.67	33.36	33.36	32.84	32.85	32.70	32.71
420070014	Pennsylvania	Beaver	37.42	30.46	30.46	28.70	28.70	28.49	28.50
420033007	Pennsylvania	Allegheny	37.40	30.73	30.73	28.81	28.81	28.63	28.64
010730023	Alabama	Jefferson	37.33	32.50	32.50	32.12	32.12	31.57	31.57
550790026	Wisconsin	Milwaukee	37.24	33.54	33.57	33.21	33.24	33.10	33.14
180970043	Indiana	Marion	37.20	29.00	29.00	27.82	27.82	27.76	27.77
261470005	Michigan	St Clair	37.14	34.16	34.16	33.38	33.38	33.29	33.30
550790043	Wisconsin	Milwaukee	37.10	34.22	34.26	33.92	33.96	33.92	33.95
180890026	Indiana	Lake	37.06	33.67	33.67	33.37	33.37	33.39	33.39
180970081	Indiana	Marion	36.96	28.83	28.83	27.59	27.59	27.54	27.55
180970066	Indiana	Marion	36.92	30.40	30.40	29.13	29.13	29.11	29.11
171191007	Illinois	Madison	36.83	31.19	31.20	30.66	30.68	30.64	30.67
550790010	Wisconsin	Milwaukee	36.71	33.47	33.50	33.13	33.16	33.13	33.17
390170003	Ohio	Butler	36.59	28.71	28.71	27.33	27.33	27.29	27.30
170316005	Illinois	Cook	36.42	35.09	35.10	34.82	34.82	34.45	34.47
420031008	Pennsylvania	Allegheny	36.35	28.15	28.15	25.62	25.62	25.38	25.40
261610008	Michigan	Washtenaw	36.32	30.20	30.20	29.33	29.33	29.26	29.27
170312001	Illinois	Cook	36.12	32.71	32.71	32.33	32.34	32.21	32.22
170310052	Illinois	Cook	36.07	30.62	30.62	30.31	30.32	30.20	30.21
421330008	Pennsylvania	York	36.06	34.55	34.56	33.91	33.92	33.79	33.80
261630015	Michigan	Wayne	36.00	33.04	33.04	31.99	31.99	31.91	31.92
010732003	Alabama	Jefferson	35.94	32.23	32.23	31.91	31.91	31.46	31.46
390618001	Ohio	Hamilton	35.85	28.23	28.23	26.73	26.73	26.64	26.65
171190023	Illinois	Madison	35.81	30.23	30.23	29.50	29.50	29.41	29.43
420031301	Pennsylvania	Allegheny	35.65	28.05	28.05	26.15	26.15	25.85	25.86
391130032	Ohio	Montgomery	35.61	25.99	25.99	24.62	24.62	24.54	24.54
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.13	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

Table 6. The Percentage of the Final Annual NO<sub>x</sub> Emission Increase (tons) in 2014 as a Function of Total Annual NO<sub>x</sub> Emissions from all Source Sectors (tons).<sup>4</sup>

State	2014 “Remedy” Control Scenario Total Annual NO <sub>x</sub> Emissions	Final Annual NO <sub>x</sub> Emission Increase	Final Annual NO <sub>x</sub> Emission Increase as a Percentage of 2014 “Remedy” Total Emissions
Alabama	315,155		
Arkansas	194,964		
Connecticut	80,793		
Delaware	31,744		
District of Columbia	9,773		
Florida	616,154		
Georgia	395,764		
Illinois	540,361		
Indiana	424,250		
Iowa	217,221		
Kansas	240,384		
Kentucky	286,806		
Louisiana	466,098		
Maine	61,657		
Maryland	181,533		
Massachusetts	175,316		
Michigan	442,544	5,228	1.2%
Minnesota	338,438		
Mississippi	216,224		
Missouri	352,631		
Nebraska	169,571	3,599	2.1%
New Hampshire	47,482		
New Jersey	209,841	679	0.3%
New York	457,927	3,485	0.8%
North Carolina	317,230		
North Dakota	127,127		
Ohio	508,054		
Oklahoma	305,859		
Pennsylvania	514,563		
Rhode Island	18,808		
South Carolina	202,118		
South Dakota	65,500		
Tennessee	293,339		
Texas	1,368,612	1,375	0.1%
Vermont	22,824		
Virginia	333,985		
West Virginia	155,245		
Wisconsin	254,989	2,473	1.0%

<sup>4</sup> For additional details about emission budgets and unit-level allocations see the Final Revisions Rule State Budgets and New Unit Set-Asides TSD and the Final Revisions Rule Unit-Level Allocations under the FIPs in the docket to this rulemaking.

Table 7. The Percentage of the Final Ozone-Season NO<sub>x</sub> Emission Increase (tons) in 2014 as a Function of Total Ozone-Season NO<sub>x</sub> Emissions from all Source Sectors (tons).<sup>5</sup>

State	2014 “Remedy” Control Scenario Total Ozone-Season NO <sub>x</sub> Emissions	Final Ozone-Season NO <sub>x</sub> Emission Increase	Final Ozone-Season NO <sub>x</sub> Emission Increase as a Percentage of 2014 “Remedy” Total Emissions
Alabama	126,382		
Arkansas	87,920		
Connecticut	31,133		
Delaware	13,693		
District of Columbia	3,805		
Florida	261,497		
Georgia	161,301		
Illinois	221,011		
Indiana	176,143		
Iowa	97,478		
Kansas	97,635		
Kentucky	117,179		
Louisiana	195,346	4,594	2.4%
Maine	24,427		
Maryland	74,401		
Massachusetts	68,324		
Michigan	180,549		
Minnesota	144,960		
Mississippi	89,326	2,154	2.4%
Missouri	149,213		
Nebraska	74,095		
New Hampshire	18,785		
New Jersey	83,761	349	0.4%
New York	182,812	1,911	1.0%
North Carolina	130,132		
North Dakota	59,336		
Ohio	208,281		
Oklahoma	125,457		
Pennsylvania	208,800		
Rhode Island	7,251		
South Carolina	83,215		
South Dakota	31,739		
Tennessee	119,966		
Texas	576,926	1,375	0.2%
Vermont	8,796		

<sup>5</sup> For additional details about emission budgets and unit-level allocations see the Final Revisions Rule State Budgets and New Unit Set-Asides TSD and the Final Revisions Rule Unit-Level Allocations under the FIPs in the docket to this rulemaking.

Virginia	136,976		
West Virginia	63,770		
Wisconsin	104,890		

Table 8. SO<sub>2</sub> EGU Emissions From Fossil and Biomass Units\* Used in AQAT (tons of SO<sub>2</sub>) in 2014 in the Final TR Including the Emissions in the Final Revisions Rule as well as the Additional Emission Increases in the Direct Final Rule.

	2014 Base Case	\$500/ton Cost Threshold	\$2,300/ton Cost Threshold	“Remedy” Control Scenario	Emission Increase Examined in AQAT
<b>State</b>					
Alabama	417,340	200,905	213,593	173,566	
Arkansas	99,411	103,431	103,431	106,685	
Connecticut	3,774	3,883	3,883	3,883	
Delaware	2,172	2,088	2,088	2,172	
District of Columbia	0	0	0	0	
Florida	143,601	137,705	136,825	148,069	
<b>Georgia</b>	<b>170,288</b>	<b>94,691</b>	<b>95,834</b>	<b>93,208</b>	<b>40,334</b>
Illinois	141,606	138,815	128,997	132,647	
<b>Indiana</b>	<b>727,786</b>	<b>262,386</b>	<b>179,539</b>	<b>195,045</b>	<b>5,338</b>
Iowa	133,083	117,830	81,137	83,827	
<b>Kansas</b>	<b>69,819</b>	<b>55,308</b>	<b>60,870</b>	<b>45,740</b>	<b>452</b>
Kentucky	488,006	160,582	106,299	116,927	
Louisiana	118,231	135,803	139,204	139,204	
Maine	2,355	2,355	2,355	2,355	
Maryland	42,926	32,187	28,203	30,368	
Massachusetts	13,365	13,364	13,363	13,363	
Michigan	269,434	210,163	148,232	162,632	
Minnesota	70,937	47,720	50,213	49,622	
Mississippi	30,972	32,454	32,455	32,109	
Missouri	390,287	221,689	175,480	186,898	
<b>Nebraska</b>	<b>73,073</b>	<b>69,466</b>	<b>71,475</b>	<b>71,340</b>	<b>3,110</b>
New Hampshire	6,453	7,100	7,199	6,742	
New Jersey	38,857	7,069	6,611	6,243	
<b>New York**</b>	<b>42,887</b>	<b>26,708</b>	<b>17,931</b>	<b>18,687</b>	<b>5,444</b>
North Carolina	126,048	109,612	63,577	69,377	
North Dakota	103,633	102,816	103,633	103,624	
<b>Ohio</b>	<b>851,199</b>	<b>313,193</b>	<b>166,691</b>	<b>178,975</b>	<b>5,163</b>
Oklahoma	137,981	137,981	138,072	138,072	
Pennsylvania	509,650	296,596	114,431	125,545	
Rhode Island	0	0	0	0	
<b>South Carolina</b>	<b>213,281</b>	<b>96,504</b>	<b>107,114</b>	<b>100,787</b>	<b>8,013</b>
South Dakota	29,711	29,711	29,711	29,711	
Tennessee	284,468	82,159	58,838	64,721	
Texas**	453,332	331,815	334,649	317,165	
Vermont	263	263	263	263	
Virginia	77,256	71,505	47,639	51,144	
West Virginia	498,507	158,445	76,778	84,344	
Wisconsin**	130,538	65,175	53,962	57,893	

\*Source: Integrated Planning Model run by EPA, 2011. See Appendix A in the TR Significant Contribution and State Emissions Budgets Final Rule TSD for list and description of the IPM \$500/ton and \$2,300/ton cost threshold and control scenario IPM runs. Emissions are shown for all fossil and biomass units. These “final cost curve” runs have NO<sub>x</sub> and ozone season NO<sub>x</sub> cost thresholds at \$500/ton (all years), SO<sub>2</sub> Group 2 at \$500/ton (all years), and SO<sub>2</sub> Group 1 (2012-2013) at \$500/ton.

\*\* Emission estimates at the \$500/ton cost threshold, \$2,300/ton cost threshold, and “remedy” control scenario include emissions from the Final Revisions Rule (assessed in the first section of this TSD).

Table 9. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Georgia Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ )					
				\$500/ton Without Georgia Budget Increase	\$500/ton With Georgia Budget Increase	\$2,300/ton Without Georgia Budget Increase	\$2,300/ton With Georgia Budget Increase	Control Scenario Without Georgia Budget Increase	Control Scenario With Georgia Budget Increase
<b>Additional Emissions Added to Georgia (tons)</b>				0	40,334	0	40,334	0	40,334
420030064	Pennsylvania	Allegheny	17.94	15.78	15.78	15.03	15.03	14.87	14.87
390350038	Ohio	Cuyahoga	15.99	14.10	14.10	13.60	13.60	13.52	13.52
10730023	Alabama	Jefferson	16.15	14.33	14.35	14.31	14.33	13.90	13.92
390618001	Ohio	Hamilton	16.01	13.55	13.55	13.01	13.01	12.97	12.98
261630033	Michigan	Wayne	15.73	14.36	14.36	13.87	13.87	13.78	13.78
390350060	Ohio	Cuyahoga	15.67	13.76	13.76	13.25	13.25	13.16	13.17
390610014	Ohio	Hamilton	15.76	13.29	13.29	12.75	12.75	12.71	12.72
390610042	Ohio	Hamilton	15.40	12.97	12.97	12.44	12.44	12.37	12.38
171191007	Illinois	Madison	15.46	13.85	13.85	13.57	13.57	13.40	13.41
10732003	Alabama	Jefferson	15.16	13.55	13.58	13.52	13.54	13.13	13.16
390350045	Ohio	Cuyahoga	15.14	13.24	13.24	12.73	12.73	12.65	12.65
180970081	Indiana	Marion	14.86	12.69	12.69	12.27	12.27	12.25	12.25
131210039	Georgia	Fulton	15.07	13.35	13.42	13.20	13.27	13.08	13.15
390617001	Ohio	Hamilton	14.74	12.30	12.30	11.76	11.76	11.72	11.73
390350065	Ohio	Cuyahoga	14.67	12.79	12.79	12.28	12.28	12.20	12.20
180970083	Indiana	Marion	14.71	12.54	12.54	12.12	12.12	12.10	12.10

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 10. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Georgia Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ )					
				\$500/ton Without Georgia Budget Increase	\$500/ton With Georgia Budget Increase	\$2,300/ton Without Georgia Budget Increase	\$2,300/ton With Georgia Budget Increase	Control Scenario Without Georgia Budget Increase	Control Scenario With Georgia Budget Increase
<b>Additional Emissions Added to Georgia (tons)</b>				0	40,334	0	40,334	0	40,334
420030064	Pennsylvania	Allegheny	18.33	16.17	16.17	15.42	15.42	15.26	15.26
390350038	Ohio	Cuyahoga	16.66	14.77	14.77	14.27	14.27	14.19	14.19
10730023	Alabama	Jefferson	16.46	14.64	14.66	14.62	14.64	14.21	14.23
390618001	Ohio	Hamilton	16.33	13.87	13.87	13.33	13.33	13.29	13.30
261630033	Michigan	Wayne	16.32	14.95	14.95	14.46	14.46	14.37	14.37
390350060	Ohio	Cuyahoga	16.18	14.27	14.27	13.76	13.76	13.67	13.68
390610014	Ohio	Hamilton	15.98	13.51	13.51	12.97	12.97	12.93	12.94
390610042	Ohio	Hamilton	15.77	13.34	13.34	12.81	12.81	12.74	12.75
171191007	Illinois	Madison	15.73	14.12	14.12	13.84	13.84	13.67	13.68
10732003	Alabama	Jefferson	15.64	14.03	14.06	14.00	14.02	13.61	13.64
390350045	Ohio	Cuyahoga	15.61	13.71	13.71	13.20	13.20	13.12	13.12
180970081	Indiana	Marion	15.16	12.99	12.99	12.57	12.57	12.55	12.55
131210039	Georgia	Fulton	15.10	13.38	13.45	13.23	13.30	13.11	13.18
390617001	Ohio	Hamilton	15.10	12.66	12.66	12.12	12.12	12.08	12.09
390350065	Ohio	Cuyahoga	15.10	13.22	13.22	12.71	12.71	12.63	12.63
180970083	Indiana	Marion	15.06	12.89	12.89	12.47	12.47	12.45	12.45

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 11. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Georgia Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Georgia Budget Increase	\$500/ton With Georgia Budget Increase	\$2,300/ton Without Georgia Budget Increase	\$2,300/ton With Georgia Budget Increase	Control Scenario Without Georgia Budget Increase	Control Scenario With Georgia Budget Increase
<b>Additional Emissions Added to Georgia (tons)</b>			0	40,334	0	40,334	0	40,334	40,334
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.57	45.54	45.54	45.46	45.46
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.19	30.25	30.25	29.88	29.89
390350038**	Ohio	Cuyahoga	39.46	34.18	34.18	33.51	33.51	33.47	33.47
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.93	33.88	33.89
390350060	Ohio	Cuyahoga	37.78	31.50	31.50	30.61	30.61	30.51	30.51
170311016**	Illinois	Cook	37.58	34.14	34.14	33.14	33.14	32.97	32.98
261630033**	Michigan	Wayne	39.48	36.32	36.32	35.01	35.01	34.76	34.77
180890022**	Indiana	Lake	34.94	32.80	32.80	32.39	32.39	32.31	32.32
540090011	West Virginia	Brooke	37.57	30.60	30.60	29.07	29.07	28.84	28.84
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87	34.87
390350045	Ohio	Cuyahoga	34.80	27.69	27.69	26.30	26.30	26.24	26.24
390811001	Ohio	Jefferson	34.56	27.64	27.64	25.79	25.79	25.57	25.58
261630019**	Michigan	Wayne	37.34	35.28	35.28	34.93	34.93	34.88	34.88
390350065	Ohio	Cuyahoga	34.91	27.66	27.66	26.11	26.11	25.96	25.97
170313301	Illinois	Cook	34.97	31.11	31.11	30.54	30.54	30.36	30.37
420070014	Pennsylvania	Beaver	36.21	29.28	29.28	27.59	27.59	27.40	27.40
420033007	Pennsylvania	Allegheny	32.40	26.27	26.27	24.88	24.88	24.78	24.79
010730023	Alabama	Jefferson	36.96	31.93	31.99	31.61	31.67	31.11	31.16
550790026	Wisconsin	Milwaukee	33.62	30.51	30.51	30.18	30.18	30.11	30.11
180970043	Indiana	Marion	35.76	28.64	28.64	27.16	27.16	27.14	27.15
261470005	Michigan	St Clair	36.23	33.35	33.35	32.78	32.78	32.68	32.69
550790043	Wisconsin	Milwaukee	36.21	32.53	32.53	31.89	31.89	31.84	31.85
180890026	Indiana	Lake	34.08	30.91	30.91	30.52	30.52	30.49	30.49
180970081	Indiana	Marion	35.85	28.44	28.44	27.35	27.35	27.30	27.31
180970066	Indiana	Marion	35.73	29.22	29.22	28.13	28.13	28.10	28.11
171191007	Illinois	Madison	36.59	29.94	29.94	29.34	29.34	29.34	29.34
550790010	Wisconsin	Milwaukee	35.47	31.54	31.54	30.86	30.86	30.86	30.86
390170003	Ohio	Butler	34.40	28.07	28.07	26.49	26.49	26.48	26.49
170316005	Illinois	Cook	34.12	32.72	32.72	32.41	32.41	32.04	32.05
420031008	Pennsylvania	Allegheny	35.04	26.95	26.95	24.69	24.69	24.49	24.49
261610008	Michigan	Washtenaw	35.05	29.40	29.40	28.55	28.55	28.47	28.49
170312001	Illinois	Cook	33.62	29.85	29.85	29.58	29.58	29.51	29.51
170310052	Illinois	Cook	34.94	30.12	30.12	29.79	29.79	29.70	29.70
421330008	Pennsylvania	York	33.38	31.60	31.60	31.03	31.03	30.93	30.93
261630015	Michigan	Wayne	35.55	32.23	32.23	31.10	31.10	31.02	31.03
010732003	Alabama	Jefferson	35.31	31.42	31.47	31.10	31.15	30.63	30.68
390618001	Ohio	Hamilton	35.29	27.63	27.63	26.11	26.11	25.97	25.99
171190023	Illinois	Madison	35.11	29.23	29.23	28.49	28.49	28.43	28.43
420031301	Pennsylvania	Allegheny	33.95	27.16	27.16	25.21	25.21	24.97	24.97
391130032	Ohio	Montgomery	33.68	24.40	24.40	23.15	23.15	23.10	23.12
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.15

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 12. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Georgia Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Georgia Budget Increase	\$500/ton With Georgia Budget Increase	\$2,300/ton Without Georgia Budget Increase	\$2,300/ton With Georgia Budget Increase	Control Scenario Without Georgia Budget Increase	Control Scenario With Georgia Budget Increase
<b>Additional Emissions Added to Georgia (tons)</b>				0	40,334	0	40,334	0	40,334
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.72	48.63	48.63	48.53	48.54
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.85	34.80	34.80	34.29	34.31
390350038**	Ohio	Cuyahoga	41.84	35.93	35.93	35.41	35.41	35.39	35.40
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.66	35.66	35.61	35.61
390350060	Ohio	Cuyahoga	40.85	33.70	33.70	33.04	33.04	32.95	32.95
170311016**	Illinois	Cook	40.44	37.41	37.41	36.55	36.55	36.41	36.42
261630033**	Michigan	Wayne	39.81	36.59	36.59	35.23	35.23	34.97	34.98
180890022**	Indiana	Lake	39.58	37.01	37.01	36.51	36.51	36.31	36.32
540090011	West Virginia	Brooke	38.39	32.23	32.23	30.02	30.02	29.64	29.65
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.49	29.49	27.60	27.60	27.44	27.44
390811001	Ohio	Jefferson	37.88	30.27	30.27	28.03	28.03	27.76	27.77
261630019**	Michigan	Wayne	37.83	36.21	36.21	35.83	35.83	35.75	35.75
390350065	Ohio	Cuyahoga	37.67	28.80	28.80	27.00	27.00	26.82	26.83
170313301	Illinois	Cook	37.67	33.36	33.36	32.85	32.85	32.71	32.71
420070014	Pennsylvania	Beaver	37.42	30.46	30.46	28.70	28.70	28.50	28.50
420033007	Pennsylvania	Allegheny	37.40	30.73	30.73	28.81	28.81	28.64	28.64
010730023	Alabama	Jefferson	37.33	32.50	32.57	32.12	32.18	31.57	31.62
550790026	Wisconsin	Milwaukee	37.24	33.57	33.57	33.24	33.24	33.14	33.14
180970043	Indiana	Marion	37.20	29.00	29.00	27.82	27.82	27.77	27.77
261470005	Michigan	St Clair	37.14	34.16	34.16	33.38	33.38	33.30	33.31
550790043	Wisconsin	Milwaukee	37.10	34.26	34.26	33.96	33.96	33.95	33.96
180890026	Indiana	Lake	37.06	33.67	33.67	33.37	33.37	33.39	33.39
180970081	Indiana	Marion	36.96	28.83	28.83	27.59	27.59	27.55	27.56
180970066	Indiana	Marion	36.92	30.40	30.40	29.13	29.13	29.11	29.12
171191007	Illinois	Madison	36.83	31.20	31.20	30.68	30.68	30.67	30.67
550790010	Wisconsin	Milwaukee	36.71	33.50	33.50	33.16	33.16	33.17	33.17
390170003	Ohio	Butler	36.59	28.71	28.71	27.33	27.33	27.30	27.31
170316005	Illinois	Cook	36.42	35.10	35.10	34.82	34.82	34.47	34.48
420031008	Pennsylvania	Allegheny	36.35	28.15	28.15	25.62	25.62	25.40	25.41
261610008	Michigan	Washtenaw	36.32	30.20	30.20	29.33	29.33	29.27	29.28
170312001	Illinois	Cook	36.12	32.71	32.71	32.34	32.34	32.22	32.23
170310052	Illinois	Cook	36.07	30.62	30.62	30.32	30.32	30.21	30.21
421330008	Pennsylvania	York	36.06	34.56	34.56	33.92	33.92	33.80	33.81
261630015	Michigan	Wayne	36.00	33.04	33.04	31.99	31.99	31.92	31.93
010732003	Alabama	Jefferson	35.94	32.23	32.27	31.91	31.91	31.46	31.51
390618001	Ohio	Hamilton	35.85	28.23	28.23	26.73	26.73	26.65	26.65
171190023	Illinois	Madison	35.81	30.23	30.23	29.50	29.50	29.43	29.44
420031301	Pennsylvania	Allegheny	35.65	28.05	28.05	26.15	26.15	25.86	25.86
391130032	Ohio	Montgomery	35.61	25.99	25.99	24.62	24.62	24.54	24.57
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.15

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 13. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Indiana Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Indiana Budget Increase	\$500/ton With Indiana Budget Increase	\$2,300/ton Without Indiana Budget Increase	\$2,300/ton With Indiana Budget Increase	Control Scenario Without Indiana Budget Increase	Control Scenario With Indiana Budget Increase
<b>Additional Emissions Added to Indiana (tons)</b>				0	5,338	0	5,338	0	5,338
420030064	Pennsylvania	Allegheny	17.94	15.78	15.78	15.03	15.03	14.87	14.87
390350038	Ohio	Cuyahoga	15.99	14.10	14.11	13.60	13.60	13.52	13.52
10730023	Alabama	Jefferson	16.15	14.33	14.33	14.31	14.31	13.90	13.90
390618001	Ohio	Hamilton	16.01	13.55	13.55	13.01	13.02	12.97	12.97
261630033	Michigan	Wayne	15.73	14.36	14.36	13.87	13.87	13.78	13.78
390350060	Ohio	Cuyahoga	15.67	13.76	13.76	13.25	13.26	13.16	13.17
390610014	Ohio	Hamilton	15.76	13.29	13.30	12.75	12.76	12.71	12.72
390610042	Ohio	Hamilton	15.40	12.97	12.98	12.44	12.45	12.37	12.38
171191007	Illinois	Madison	15.46	13.85	13.85	13.57	13.58	13.40	13.40
10732003	Alabama	Jefferson	15.16	13.55	13.55	13.52	13.52	13.13	13.13
390350045	Ohio	Cuyahoga	15.14	13.24	13.24	12.73	12.74	12.65	12.65
180970081	Indiana	Marion	14.86	12.69	12.70	12.27	12.28	12.25	12.26
131210039	Georgia	Fulton	15.07	13.35	13.35	13.20	13.20	13.08	13.08
390617001	Ohio	Hamilton	14.74	12.30	12.31	11.76	11.77	11.72	11.73
390350065	Ohio	Cuyahoga	14.67	12.79	12.79	12.28	12.29	12.20	12.20
180970083	Indiana	Marion	14.71	12.54	12.55	12.12	12.13	12.10	12.11

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 14. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Indiana Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Indiana Budget Increase	\$500/ton With Indiana Budget Increase	\$2,300/ton Without Indiana Budget Increase	\$2,300/ton With Indiana Budget Increase	Control Scenario Without Indiana Budget Increase	Control Scenario With Indiana Budget Increase
<b>Additional Emissions Added to Indiana (tons)</b>				0	5,338	0	5,338	0	5,338
420030064	Pennsylvania	Allegheny	18.33	16.17	16.17	15.42	15.42	15.26	15.26
390350038	Ohio	Cuyahoga	16.66	14.77	14.78	14.27	14.27	14.19	14.19
10730023	Alabama	Jefferson	16.46	14.64	14.64	14.62	14.62	14.21	14.21
390618001	Ohio	Hamilton	16.33	13.87	13.87	13.33	13.34	13.29	13.29
261630033	Michigan	Wayne	16.32	14.95	14.95	14.46	14.46	14.37	14.37
390350060	Ohio	Cuyahoga	16.18	14.27	14.27	13.76	13.77	13.67	13.68
390610014	Ohio	Hamilton	15.98	13.51	13.52	12.97	12.98	12.93	12.94
390610042	Ohio	Hamilton	15.77	13.34	13.35	12.81	12.82	12.74	12.75
171191007	Illinois	Madison	15.73	14.12	14.12	13.84	13.85	13.67	13.67
10732003	Alabama	Jefferson	15.64	14.03	14.03	14.00	14.00	13.61	13.61
390350045	Ohio	Cuyahoga	15.61	13.71	13.71	13.20	13.21	13.12	13.12
180970081	Indiana	Marion	15.16	12.99	13.00	12.57	12.58	12.55	12.56
131210039	Georgia	Fulton	15.10	13.38	13.38	13.23	13.23	13.11	13.11
390617001	Ohio	Hamilton	15.10	12.66	12.67	12.12	12.13	12.08	12.09
390350065	Ohio	Cuyahoga	15.10	13.22	13.22	12.71	12.72	12.63	12.63
180970083	Indiana	Marion	15.06	12.89	12.90	12.47	12.48	12.45	12.46

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 15. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Indiana Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Indiana Budget Increase	\$500/ton With Indiana Budget Increase	\$2,300/ton Without Indiana Budget Increase	\$2,300/ton With Indiana Budget Increase	Control Scenario Without Indiana Budget Increase	Control Scenario With Indiana Budget Increase
<b>Additional Emissions Added to Indiana (tons)</b>			0	5,338	0	5,338	0	5,338	5,338
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.58	45.54	45.54	45.46	45.46
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.20	30.25	30.26	29.88	29.89
390350038**	Ohio	Cuyahoga	39.46	34.18	34.18	33.51	33.52	33.47	33.47
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.93	33.88	33.89
390350060	Ohio	Cuyahoga	37.78	31.50	31.51	30.61	30.61	30.51	30.51
170311016**	Illinois	Cook	37.58	34.14	34.15	33.14	33.15	32.97	32.99
261630033**	Michigan	Wayne	39.48	36.32	36.33	35.01	35.02	34.76	34.77
180890022**	Indiana	Lake	34.94	32.80	32.82	32.39	32.40	32.31	32.33
540090011	West Virginia	Brooke	37.57	30.60	30.60	29.07	29.08	28.84	28.85
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87	34.87
390350045	Ohio	Cuyahoga	34.80	27.69	27.70	26.30	26.31	26.24	26.24
390811001	Ohio	Jefferson	34.56	27.64	27.65	25.79	25.80	25.57	25.58
261630019**	Michigan	Wayne	37.34	35.28	35.28	34.93	34.93	34.88	34.88
390350065	Ohio	Cuyahoga	34.91	27.66	27.66	26.11	26.12	25.96	25.97
170313301	Illinois	Cook	34.97	31.11	31.12	30.54	30.55	30.36	30.37
420070014	Pennsylvania	Beaver	36.21	29.28	29.28	27.59	27.59	27.40	27.40
420033007	Pennsylvania	Allegheny	32.40	26.27	26.28	24.88	24.89	24.78	24.79
010730023	Alabama	Jefferson	36.96	31.93	31.94	31.61	31.62	31.11	31.11
550790026	Wisconsin	Milwaukee	33.62	30.51	30.51	30.18	30.18	30.11	30.11
180970043	Indiana	Marion	35.76	28.64	28.68	27.16	27.20	27.14	27.17
261470005	Michigan	St Clair	36.23	33.35	33.36	32.78	32.79	32.68	32.69
550790043	Wisconsin	Milwaukee	36.21	32.53	32.54	31.89	31.90	31.84	31.85
180890026	Indiana	Lake	34.08	30.91	30.92	30.52	30.53	30.49	30.50
180970081	Indiana	Marion	35.85	28.44	28.46	27.35	27.38	27.30	27.33
180970066	Indiana	Marion	35.73	29.22	29.25	28.13	28.16	28.10	28.13
171191007	Illinois	Madison	36.59	29.94	29.95	29.34	29.35	29.34	29.34
550790010	Wisconsin	Milwaukee	35.47	31.54	31.54	30.86	30.86	30.86	30.87
390170003	Ohio	Butler	34.40	28.07	28.09	26.49	26.50	26.48	26.50
170316005	Illinois	Cook	34.12	32.72	32.73	32.41	32.42	32.04	32.04
420031008	Pennsylvania	Allegheny	35.04	26.95	26.96	24.69	24.70	24.49	24.49
261610008	Michigan	Washtenaw	35.05	29.40	29.42	28.55	28.55	28.47	28.48
170312001	Illinois	Cook	33.62	29.85	29.85	29.58	29.59	29.51	29.52
170310052	Illinois	Cook	34.94	30.12	30.12	29.79	29.79	29.70	29.70
421330008	Pennsylvania	York	33.38	31.60	31.60	31.03	31.04	30.93	30.93
261630015	Michigan	Wayne	35.55	32.23	32.24	31.10	31.10	31.02	31.03
010732003	Alabama	Jefferson	35.31	31.42	31.42	31.10	31.10	30.63	30.63
390618001	Ohio	Hamilton	35.29	27.63	27.65	26.11	26.12	25.97	25.98
171190023	Illinois	Madison	35.11	29.23	29.24	28.49	28.50	28.43	28.43
420031301	Pennsylvania	Allegheny	33.95	27.16	27.17	25.21	25.22	24.97	24.97
391130032	Ohio	Montgomery	33.68	24.40	24.41	23.15	23.16	23.10	23.10
420030116	Pennsylvania	Allegheny	35.59	27.97	27.98	26.34	26.35	26.14	26.15

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 16. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Indiana Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Indiana Budget Increase	\$500/ton With Indiana Budget Increase	\$2,300/ton Without Indiana Budget Increase	\$2,300/ton With Indiana Budget Increase	Control Scenario Without Indiana Budget Increase	Control Scenario With Indiana Budget Increase
<b>Additional Emissions Added to Indiana (tons)</b>				0	5,338	0	5,338	0	5,338
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.72	48.63	48.64	48.53	48.54
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.86	34.80	34.81	34.29	34.30
390350038**	Ohio	Cuyahoga	41.84	35.93	35.93	35.41	35.41	35.39	35.40
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.66	35.66	35.61	35.61
390350060	Ohio	Cuyahoga	40.85	33.70	33.70	33.04	33.05	32.95	32.95
170311016**	Illinois	Cook	40.44	37.41	37.42	36.55	36.56	36.41	36.43
261630033**	Michigan	Wayne	39.81	36.59	36.60	35.23	35.24	34.97	34.98
180890022**	Indiana	Lake	39.58	37.01	37.03	36.51	36.53	36.31	36.33
540090011	West Virginia	Brooke	38.39	32.23	32.24	30.02	30.03	29.64	29.65
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.49	29.50	27.60	27.61	27.44	27.44
390811001	Ohio	Jefferson	37.88	30.27	30.28	28.03	28.04	27.76	27.77
261630019**	Michigan	Wayne	37.83	36.21	36.21	35.83	35.83	35.75	35.75
390350065	Ohio	Cuyahoga	37.67	28.80	28.81	27.00	27.01	26.82	26.83
170313301	Illinois	Cook	37.67	33.36	33.37	32.85	32.85	32.71	32.71
420070014	Pennsylvania	Beaver	37.42	30.46	30.47	28.70	28.71	28.50	28.51
420033007	Pennsylvania	Allegheny	37.40	30.73	30.74	28.81	28.81	28.64	28.65
010730023	Alabama	Jefferson	37.33	32.50	32.50	32.12	32.12	31.57	31.58
550790026	Wisconsin	Milwaukee	37.24	33.57	33.58	33.24	33.24	33.14	33.14
180970043	Indiana	Marion	37.20	29.00	29.04	27.82	27.85	27.77	27.79
261470005	Michigan	St Clair	37.14	34.16	34.17	33.38	33.39	33.30	33.30
550790043	Wisconsin	Milwaukee	37.10	34.26	34.26	33.96	33.96	33.95	33.96
180890026	Indiana	Lake	37.06	33.67	33.68	33.37	33.38	33.39	33.40
180970081	Indiana	Marion	36.96	28.83	28.86	27.59	27.62	27.55	27.58
180970066	Indiana	Marion	36.92	30.40	30.44	29.13	29.17	29.11	29.15
171191007	Illinois	Madison	36.83	31.20	31.21	30.68	30.69	30.67	30.67
550790010	Wisconsin	Milwaukee	36.71	33.50	33.51	33.16	33.16	33.17	33.17
390170003	Ohio	Butler	36.59	28.71	28.72	27.33	27.34	27.30	27.31
170316005	Illinois	Cook	36.42	35.10	35.10	34.82	34.83	34.47	34.47
420031008	Pennsylvania	Allegheny	36.35	28.15	28.17	25.62	25.63	25.40	25.41
261610008	Michigan	Washtenaw	36.32	30.20	30.21	29.33	29.34	29.27	29.27
170312001	Illinois	Cook	36.12	32.71	32.72	32.34	32.35	32.22	32.23
170310052	Illinois	Cook	36.07	30.62	30.63	30.32	30.32	30.21	30.21
421330008	Pennsylvania	York	36.06	34.56	34.56	33.92	33.92	33.80	33.80
261630015	Michigan	Wayne	36.00	33.04	33.05	31.99	31.99	31.92	31.92
010732003	Alabama	Jefferson	35.94	32.23	32.23	31.91	31.91	31.46	31.46
390618001	Ohio	Hamilton	35.85	28.23	28.25	26.73	26.74	26.65	26.66
171190023	Illinois	Madison	35.81	30.23	30.24	29.50	29.51	29.43	29.44
420031301	Pennsylvania	Allegheny	35.65	28.05	28.06	26.15	26.16	25.86	25.86
391130032	Ohio	Montgomery	35.61	25.99	26.01	24.62	24.63	24.54	24.55
420030116	Pennsylvania	Allegheny	35.59	27.97	27.98	26.34	26.35	26.14	26.15

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 17. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Kansas Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ )					
				\$500/ton Without Kansas Budget Increase	\$500/ton With Kansas Budget Increase	\$2,300/ton Without Kansas Budget Increase	\$2,300/ton With Kansas Budget Increase	Control Scenario Without Kansas Budget Increase	Control Scenario With Kansas Budget Increase
<b>Additional Emissions Added to Kansas (tons)</b>				0	452	0	452	0	452
420030064	Pennsylvania	Allegheny	17.94	15.78	15.78	15.03	15.03	14.87	14.87
390350038	Ohio	Cuyahoga	15.99	14.10	14.10	13.60	13.60	13.52	13.52
10730023	Alabama	Jefferson	16.15	14.33	14.33	14.31	14.31	13.90	13.90
390618001	Ohio	Hamilton	16.01	13.55	13.55	13.01	13.01	12.97	12.97
261630033	Michigan	Wayne	15.73	14.36	14.36	13.87	13.87	13.78	13.78
390350060	Ohio	Cuyahoga	15.67	13.76	13.76	13.25	13.25	13.16	13.16
390610014	Ohio	Hamilton	15.76	13.29	13.29	12.75	12.75	12.71	12.71
390610042	Ohio	Hamilton	15.40	12.97	12.97	12.44	12.44	12.37	12.37
171191007	Illinois	Madison	15.46	13.85	13.85	13.57	13.57	13.40	13.40
10732003	Alabama	Jefferson	15.16	13.55	13.55	13.52	13.52	13.13	13.13
390350045	Ohio	Cuyahoga	15.14	13.24	13.24	12.73	12.73	12.65	12.65
180970081	Indiana	Marion	14.86	12.69	12.69	12.27	12.27	12.25	12.25
131210039	Georgia	Fulton	15.07	13.35	13.35	13.20	13.20	13.08	13.08
390617001	Ohio	Hamilton	14.74	12.30	12.30	11.76	11.76	11.72	11.72
390350065	Ohio	Cuyahoga	14.67	12.79	12.79	12.28	12.28	12.20	12.20
180970083	Indiana	Marion	14.71	12.54	12.54	12.12	12.12	12.10	12.10

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 18. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Kansas Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ )					
				\$500/ton Without Kansas Budget Increase	\$500/ton With Kansas Budget Increase	\$2,300/ton Without Kansas Budget Increase	\$2,300/ton With Kansas Budget Increase	Control Scenario Without Kansas Budget Increase	Control Scenario With Kansas Budget Increase
<b>Additional Emissions Added to Kansas (tons)</b>				0	452	0	452	0	452
420030064	Pennsylvania	Allegheny	18.33	16.17	16.17	15.42	15.42	15.26	15.26
390350038	Ohio	Cuyahoga	16.66	14.77	14.77	14.27	14.27	14.19	14.19
10730023	Alabama	Jefferson	16.46	14.64	14.64	14.62	14.62	14.21	14.21
390618001	Ohio	Hamilton	16.33	13.87	13.87	13.33	13.33	13.29	13.29
261630033	Michigan	Wayne	16.32	14.95	14.95	14.46	14.46	14.37	14.37
390350060	Ohio	Cuyahoga	16.18	14.27	14.27	13.76	13.76	13.67	13.67
390610014	Ohio	Hamilton	15.98	13.51	13.51	12.97	12.97	12.93	12.93
390610042	Ohio	Hamilton	15.77	13.34	13.34	12.81	12.81	12.74	12.74
171191007	Illinois	Madison	15.73	14.12	14.12	13.84	13.84	13.67	13.67
10732003	Alabama	Jefferson	15.64	14.03	14.03	14.00	14.00	13.61	13.61
390350045	Ohio	Cuyahoga	15.61	13.71	13.71	13.20	13.20	13.12	13.12
180970081	Indiana	Marion	15.16	12.99	12.99	12.57	12.57	12.55	12.55
131210039	Georgia	Fulton	15.10	13.38	13.38	13.23	13.23	13.11	13.11
390617001	Ohio	Hamilton	15.10	12.66	12.66	12.12	12.12	12.08	12.08
390350065	Ohio	Cuyahoga	15.10	13.22	13.22	12.71	12.71	12.63	12.63
180970083	Indiana	Marion	15.06	12.89	12.89	12.47	12.47	12.45	12.45

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 19. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Kansas Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Kansas Budget Increase	\$500/ton With Kansas Budget Increase	\$2,300/ton Without Kansas Budget Increase	\$2,300/ton With Kansas Budget Increase	Control Scenario Without Kansas Budget Increase	Control Scenario With Kansas Budget Increase
<b>Additional Emissions Added to Kansas (tons)</b>				0	452	0	452	0	452
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.57	45.54	45.54	45.46	45.46
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.19	30.25	30.25	29.88	29.88
390350038**	Ohio	Cuyahoga	39.46	34.18	34.18	33.51	33.51	33.47	33.47
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.93	33.88	33.88
390350060	Ohio	Cuyahoga	37.78	31.50	31.50	30.61	30.61	30.51	30.51
170311016**	Illinois	Cook	37.58	34.14	34.14	33.14	33.14	32.97	32.97
261630033**	Michigan	Wayne	39.48	36.32	36.32	35.01	35.01	34.76	34.76
180890022**	Indiana	Lake	34.94	32.80	32.80	32.39	32.39	32.31	32.31
540090011	West Virginia	Brooke	37.57	30.60	30.60	29.07	29.07	28.84	28.84
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87	34.87
390350045	Ohio	Cuyahoga	34.80	27.69	27.69	26.30	26.30	26.24	26.24
390811001	Ohio	Jefferson	34.56	27.64	27.64	25.79	25.79	25.57	25.57
261630019**	Michigan	Wayne	37.34	35.28	35.28	34.93	34.93	34.88	34.88
390350065	Ohio	Cuyahoga	34.91	27.66	27.66	26.11	26.11	25.96	25.96
170313301	Illinois	Cook	34.97	31.11	31.11	30.54	30.54	30.36	30.36
420070014	Pennsylvania	Beaver	36.21	29.28	29.28	27.59	27.59	27.40	27.40
420033007	Pennsylvania	Allegheny	32.40	26.27	26.27	24.88	24.88	24.78	24.78
010730023	Alabama	Jefferson	36.96	31.93	31.93	31.61	31.61	31.11	31.11
550790026	Wisconsin	Milwaukee	33.62	30.51	30.51	30.18	30.18	30.11	30.11
180970043	Indiana	Marion	35.76	28.64	28.64	27.16	27.16	27.14	27.14
261470005	Michigan	St Clair	36.23	33.35	33.35	32.78	32.78	32.68	32.68
550790043	Wisconsin	Milwaukee	36.21	32.53	32.53	31.89	31.89	31.84	31.84
180890026	Indiana	Lake	34.08	30.91	30.91	30.52	30.52	30.49	30.49
180970081	Indiana	Marion	35.85	28.44	28.44	27.35	27.35	27.30	27.30
180970066	Indiana	Marion	35.73	29.22	29.22	28.13	28.13	28.10	28.10
171191007	Illinois	Madison	36.59	29.94	29.94	29.34	29.34	29.34	29.34
550790010	Wisconsin	Milwaukee	35.47	31.54	31.54	30.86	30.86	30.86	30.86
390170003	Ohio	Butler	34.40	28.07	28.07	26.49	26.49	26.48	26.48
170316005	Illinois	Cook	34.12	32.72	32.72	32.41	32.41	32.04	32.04
420031008	Pennsylvania	Allegheny	35.04	26.95	26.95	24.69	24.69	24.49	24.49
261610008	Michigan	Washtenaw	35.05	29.40	29.40	28.55	28.55	28.47	28.47
170312001	Illinois	Cook	33.62	29.85	29.85	29.58	29.58	29.51	29.51
170310052	Illinois	Cook	34.94	30.12	30.12	29.79	29.79	29.70	29.70
421330008	Pennsylvania	York	33.38	31.60	31.60	31.03	31.03	30.93	30.93
261630015	Michigan	Wayne	35.55	32.23	32.23	31.10	31.10	31.02	31.02
010732003	Alabama	Jefferson	35.31	31.42	31.42	31.10	31.10	30.63	30.63
390618001	Ohio	Hamilton	35.29	27.63	27.63	26.11	26.11	25.97	25.97
171190023	Illinois	Madison	35.11	29.23	29.23	28.49	28.49	28.43	28.43
420031301	Pennsylvania	Allegheny	33.95	27.16	27.16	25.21	25.21	24.97	24.97
391130032	Ohio	Montgomery	33.68	24.40	24.40	23.15	23.15	23.10	23.10
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 20. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Kansas Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Kansas Budget Increase	\$500/ton With Kansas Budget Increase	\$2,300/ton Without Kansas Budget Increase	\$2,300/ton With Kansas Budget Increase	Control Scenario Without Kansas Budget Increase	Control Scenario With Kansas Budget Increase
<b>Additional Emissions Added to Kansas (tons)</b>				0	452	0	452	0	452
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.72	48.63	48.63	48.53	48.53
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.85	34.80	34.80	34.29	34.29
390350038**	Ohio	Cuyahoga	41.84	35.93	35.93	35.41	35.41	35.39	35.39
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.66	35.66	35.61	35.61
390350060	Ohio	Cuyahoga	40.85	33.70	33.70	33.04	33.04	32.95	32.95
170311016**	Illinois	Cook	40.44	37.41	37.41	36.55	36.55	36.41	36.41
261630033**	Michigan	Wayne	39.81	36.59	36.59	35.23	35.23	34.97	34.97
180890022**	Indiana	Lake	39.58	37.01	37.01	36.51	36.51	36.31	36.31
540090011	West Virginia	Brooke	38.39	32.23	32.23	30.02	30.02	29.64	29.64
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.49	29.49	27.60	27.60	27.44	27.44
390811001	Ohio	Jefferson	37.88	30.27	30.27	28.03	28.03	27.76	27.76
261630019**	Michigan	Wayne	37.83	36.21	36.21	35.83	35.83	35.75	35.75
390350065	Ohio	Cuyahoga	37.67	28.80	28.80	27.00	27.00	26.82	26.82
170313301	Illinois	Cook	37.67	33.36	33.36	32.85	32.85	32.71	32.71
420070014	Pennsylvania	Beaver	37.42	30.46	30.46	28.70	28.70	28.50	28.50
420033007	Pennsylvania	Allegheny	37.40	30.73	30.73	28.81	28.81	28.64	28.64
010730023	Alabama	Jefferson	37.33	32.50	32.50	32.12	32.12	31.57	31.57
550790026	Wisconsin	Milwaukee	37.24	33.57	33.57	33.24	33.24	33.14	33.14
180970043	Indiana	Marion	37.20	29.00	29.00	27.82	27.82	27.77	27.77
261470005	Michigan	St Clair	37.14	34.16	34.16	33.38	33.38	33.30	33.30
550790043	Wisconsin	Milwaukee	37.10	34.26	34.26	33.96	33.96	33.95	33.95
180890026	Indiana	Lake	37.06	33.67	33.67	33.37	33.37	33.39	33.39
180970081	Indiana	Marion	36.96	28.83	28.83	27.59	27.59	27.55	27.55
180970066	Indiana	Marion	36.92	30.40	30.40	29.13	29.13	29.11	29.11
171191007	Illinois	Madison	36.83	31.20	31.20	30.68	30.68	30.67	30.67
550790010	Wisconsin	Milwaukee	36.71	33.50	33.50	33.16	33.16	33.17	33.17
390170003	Ohio	Butler	36.59	28.71	28.71	27.33	27.33	27.30	27.30
170316005	Illinois	Cook	36.42	35.10	35.10	34.82	34.82	34.47	34.47
420031008	Pennsylvania	Allegheny	36.35	28.15	28.15	25.62	25.62	25.40	25.40
261610008	Michigan	Washtenaw	36.32	30.20	30.20	29.33	29.33	29.27	29.27
170312001	Illinois	Cook	36.12	32.71	32.71	32.34	32.34	32.22	32.22
170310052	Illinois	Cook	36.07	30.62	30.62	30.32	30.32	30.21	30.21
421330008	Pennsylvania	York	36.06	34.56	34.56	33.92	33.92	33.80	33.80
261630015	Michigan	Wayne	36.00	33.04	33.04	31.99	31.99	31.92	31.92
010732003	Alabama	Jefferson	35.94	32.23	32.23	31.91	31.91	31.46	31.46
390618001	Ohio	Hamilton	35.85	28.23	28.23	26.73	26.73	26.65	26.65
171190023	Illinois	Madison	35.81	30.23	30.23	29.50	29.50	29.43	29.43
420031301	Pennsylvania	Allegheny	35.65	28.05	28.05	26.15	26.15	25.86	25.86
391130032	Ohio	Montgomery	35.61	25.99	25.99	24.62	24.62	24.54	24.54
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 21. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Nebraska Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Nebraska Budget Increase	\$500/ton With Nebraska Budget Increase	\$2,300/ton Without Nebraska Budget Increase	\$2,300/ton With Nebraska Budget Increase	Control Scenario Without Nebraska Budget Increase	Control Scenario With Nebraska Budget Increase
<b>Additional Emissions Added to Nebraska (tons)</b>				0	3,110	0	3,110	0	3,110
420030064	Pennsylvania	Allegheny	17.94	15.78	15.78	15.03	15.03	14.87	14.87
390350038	Ohio	Cuyahoga	15.99	14.10	14.10	13.60	13.60	13.52	13.52
10730023	Alabama	Jefferson	16.15	14.33	14.33	14.31	14.31	13.90	13.90
390618001	Ohio	Hamilton	16.01	13.55	13.55	13.01	13.01	12.97	12.97
261630033	Michigan	Wayne	15.73	14.36	14.36	13.87	13.87	13.78	13.78
390350060	Ohio	Cuyahoga	15.67	13.76	13.76	13.25	13.25	13.16	13.17
390610014	Ohio	Hamilton	15.76	13.29	13.29	12.75	12.75	12.71	12.71
390610042	Ohio	Hamilton	15.40	12.97	12.97	12.44	12.44	12.37	12.37
171191007	Illinois	Madison	15.46	13.85	13.85	13.57	13.57	13.40	13.40
10732003	Alabama	Jefferson	15.16	13.55	13.55	13.52	13.52	13.13	13.13
390350045	Ohio	Cuyahoga	15.14	13.24	13.24	12.73	12.73	12.65	12.65
180970081	Indiana	Marion	14.86	12.69	12.69	12.27	12.27	12.25	12.25
131210039	Georgia	Fulton	15.07	13.35	13.35	13.20	13.20	13.08	13.08
390617001	Ohio	Hamilton	14.74	12.30	12.30	11.76	11.76	11.72	11.72
390350065	Ohio	Cuyahoga	14.67	12.79	12.79	12.28	12.28	12.20	12.20
180970083	Indiana	Marion	14.71	12.54	12.54	12.12	12.12	12.10	12.10

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 22. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Nebraska Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Nebraska Budget Increase	\$500/ton With Nebraska Budget Increase	\$2,300/ton Without Nebraska Budget Increase	\$2,300/ton With Nebraska Budget Increase	Control Scenario Without Nebraska Budget Increase	Control Scenario With Nebraska Budget Increase
<b>Additional Emissions Added to Nebraska (tons)</b>				0	3,110	0	3,110	0	3,110
420030064	Pennsylvania	Allegheny	18.33	16.17	16.17	15.42	15.42	15.26	15.26
390350038	Ohio	Cuyahoga	16.66	14.77	14.77	14.27	14.27	14.19	14.19
10730023	Alabama	Jefferson	16.46	14.64	14.64	14.62	14.62	14.21	14.21
390618001	Ohio	Hamilton	16.33	13.87	13.87	13.33	13.33	13.29	13.29
261630033	Michigan	Wayne	16.32	14.95	14.95	14.46	14.46	14.37	14.37
390350060	Ohio	Cuyahoga	16.18	14.27	14.27	13.76	13.76	13.67	13.68
390610014	Ohio	Hamilton	15.98	13.51	13.51	12.97	12.97	12.93	12.93
390610042	Ohio	Hamilton	15.77	13.34	13.34	12.81	12.81	12.74	12.74
171191007	Illinois	Madison	15.73	14.12	14.12	13.84	13.84	13.67	13.67
10732003	Alabama	Jefferson	15.64	14.03	14.03	14.00	14.00	13.61	13.61
390350045	Ohio	Cuyahoga	15.61	13.71	13.71	13.20	13.20	13.12	13.12
180970081	Indiana	Marion	15.16	12.99	12.99	12.57	12.57	12.55	12.55
131210039	Georgia	Fulton	15.10	13.38	13.38	13.23	13.23	13.11	13.11
390617001	Ohio	Hamilton	15.10	12.66	12.66	12.12	12.12	12.08	12.08
390350065	Ohio	Cuyahoga	15.10	13.22	13.22	12.71	12.71	12.63	12.63
180970083	Indiana	Marion	15.06	12.89	12.89	12.47	12.47	12.45	12.45

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 23. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Nebraska Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Nebraska Budget Increase	\$500/ton With Nebraska Budget Increase	\$2,300/ton Without Nebraska Budget Increase	\$2,300/ton With Nebraska Budget Increase	Control Scenario Without Nebraska Budget Increase	Control Scenario With Nebraska Budget Increase
<b>Additional Emissions Added to Nebraska (tons)</b>			0	3,110	0	3,110	0	3,110	3,110
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.57	45.54	45.54	45.46	45.46
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.19	30.25	30.25	29.88	29.88
390350038**	Ohio	Cuyahoga	39.46	34.18	34.18	33.51	33.51	33.47	33.47
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.93	33.88	33.88
390350060	Ohio	Cuyahoga	37.78	31.50	31.50	30.61	30.61	30.51	30.51
170311016**	Illinois	Cook	37.58	34.14	34.14	33.14	33.14	32.97	32.97
261630033**	Michigan	Wayne	39.48	36.32	36.32	35.01	35.01	34.76	34.76
180890022**	Indiana	Lake	34.94	32.80	32.80	32.39	32.39	32.31	32.32
540090011	West Virginia	Brooke	37.57	30.60	30.60	29.07	29.07	28.84	28.84
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87	34.87
390350045	Ohio	Cuyahoga	34.80	27.69	27.69	26.30	26.30	26.24	26.24
390811001	Ohio	Jefferson	34.56	27.64	27.64	25.79	25.79	25.57	25.57
261630019**	Michigan	Wayne	37.34	35.28	35.28	34.93	34.93	34.88	34.88
390350065	Ohio	Cuyahoga	34.91	27.66	27.66	26.11	26.11	25.96	25.96
170313301	Illinois	Cook	34.97	31.11	31.11	30.54	30.54	30.36	30.36
420070014	Pennsylvania	Beaver	36.21	29.28	29.28	27.59	27.59	27.40	27.40
420033007	Pennsylvania	Allegheny	32.40	26.27	26.27	24.88	24.88	24.78	24.79
010730023	Alabama	Jefferson	36.96	31.93	31.93	31.61	31.61	31.11	31.11
550790026	Wisconsin	Milwaukee	33.62	30.51	30.52	30.18	30.18	30.11	30.11
180970043	Indiana	Marion	35.76	28.64	28.64	27.16	27.16	27.14	27.14
261470005	Michigan	St Clair	36.23	33.35	33.35	32.78	32.78	32.68	32.68
550790043	Wisconsin	Milwaukee	36.21	32.53	32.53	31.89	31.89	31.84	31.85
180890026	Indiana	Lake	34.08	30.91	30.91	30.52	30.52	30.49	30.49
180970081	Indiana	Marion	35.85	28.44	28.44	27.35	27.35	27.30	27.30
180970066	Indiana	Marion	35.73	29.22	29.22	28.13	28.13	28.10	28.10
171191007	Illinois	Madison	36.59	29.94	29.94	29.34	29.34	29.34	29.34
550790010	Wisconsin	Milwaukee	35.47	31.54	31.54	30.86	30.86	30.86	30.87
390170003	Ohio	Butler	34.40	28.07	28.07	26.49	26.49	26.48	26.48
170316005	Illinois	Cook	34.12	32.72	32.72	32.41	32.41	32.04	32.04
420031008	Pennsylvania	Allegheny	35.04	26.95	26.95	24.69	24.69	24.49	24.49
261610008	Michigan	Washtenaw	35.05	29.40	29.40	28.55	28.55	28.47	28.47
170312001	Illinois	Cook	33.62	29.85	29.85	29.58	29.58	29.51	29.51
170310052	Illinois	Cook	34.94	30.12	30.12	29.79	29.79	29.70	29.70
421330008	Pennsylvania	York	33.38	31.60	31.60	31.03	31.03	30.93	30.93
261630015	Michigan	Wayne	35.55	32.23	32.23	31.10	31.10	31.02	31.02
010732003	Alabama	Jefferson	35.31	31.42	31.42	31.10	31.10	30.63	30.63
390618001	Ohio	Hamilton	35.29	27.63	27.63	26.11	26.11	25.97	25.97
171190023	Illinois	Madison	35.11	29.23	29.23	28.49	28.49	28.43	28.43
420031301	Pennsylvania	Allegheny	33.95	27.16	27.16	25.21	25.21	24.97	24.97
391130032	Ohio	Montgomery	33.68	24.40	24.40	23.15	23.15	23.10	23.10
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 24. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Nebraska Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Nebraska Budget Increase	\$500/ton With Nebraska Budget Increase	\$2,300/ton Without Nebraska Budget Increase	\$2,300/ton With Nebraska Budget Increase	Control Scenario Without Nebraska Budget Increase	Control Scenario With Nebraska Budget Increase
<b>Additional Emissions Added to Nebraska (tons)</b>				0	3,110	0	3,110	0	3,110
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.72	48.63	48.63	48.53	48.53
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.85	34.80	34.80	34.29	34.29
390350038**	Ohio	Cuyahoga	41.84	35.93	35.93	35.41	35.41	35.39	35.40
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.66	35.66	35.61	35.61
390350060	Ohio	Cuyahoga	40.85	33.70	33.70	33.04	33.04	32.95	32.95
170311016**	Illinois	Cook	40.44	37.41	37.41	36.55	36.55	36.41	36.42
261630033**	Michigan	Wayne	39.81	36.59	36.59	35.23	35.23	34.97	34.97
180890022**	Indiana	Lake	39.58	37.01	37.01	36.51	36.51	36.31	36.31
540090011	West Virginia	Brooke	38.39	32.23	32.23	30.02	30.02	29.64	29.64
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.49	29.49	27.60	27.60	27.44	27.44
390811001	Ohio	Jefferson	37.88	30.27	30.27	28.03	28.03	27.76	27.77
261630019**	Michigan	Wayne	37.83	36.21	36.21	35.83	35.83	35.75	35.75
390350065	Ohio	Cuyahoga	37.67	28.80	28.80	27.00	27.00	26.82	26.83
170313301	Illinois	Cook	37.67	33.36	33.36	32.85	32.85	32.71	32.71
420070014	Pennsylvania	Beaver	37.42	30.46	30.46	28.70	28.70	28.50	28.50
420033007	Pennsylvania	Allegheny	37.40	30.73	30.73	28.81	28.81	28.64	28.64
010730023	Alabama	Jefferson	37.33	32.50	32.50	32.12	32.12	31.57	31.57
550790026	Wisconsin	Milwaukee	37.24	33.57	33.58	33.24	33.24	33.14	33.15
180970043	Indiana	Marion	37.20	29.00	29.00	27.82	27.82	27.77	27.77
261470005	Michigan	St Clair	37.14	34.16	34.16	33.38	33.38	33.30	33.30
550790043	Wisconsin	Milwaukee	37.10	34.26	34.26	33.96	33.96	33.95	33.96
180890026	Indiana	Lake	37.06	33.67	33.67	33.37	33.37	33.39	33.39
180970081	Indiana	Marion	36.96	28.83	28.83	27.59	27.59	27.55	27.55
180970066	Indiana	Marion	36.92	30.40	30.40	29.13	29.13	29.11	29.11
171191007	Illinois	Madison	36.83	31.20	31.20	30.68	30.68	30.67	30.67
550790010	Wisconsin	Milwaukee	36.71	33.50	33.51	33.16	33.16	33.17	33.17
390170003	Ohio	Butler	36.59	28.71	28.71	27.33	27.33	27.30	27.30
170316005	Illinois	Cook	36.42	35.10	35.10	34.82	34.82	34.47	34.47
420031008	Pennsylvania	Allegheny	36.35	28.15	28.15	25.62	25.62	25.40	25.40
261610008	Michigan	Washtenaw	36.32	30.20	30.20	29.33	29.33	29.27	29.27
170312001	Illinois	Cook	36.12	32.71	32.71	32.34	32.34	32.22	32.22
170310052	Illinois	Cook	36.07	30.62	30.62	30.32	30.32	30.21	30.21
421330008	Pennsylvania	York	36.06	34.56	34.56	33.92	33.92	33.80	33.80
261630015	Michigan	Wayne	36.00	33.04	33.04	31.99	31.99	31.92	31.92
010732003	Alabama	Jefferson	35.94	32.23	32.23	31.91	31.91	31.46	31.46
390618001	Ohio	Hamilton	35.85	28.23	28.23	26.73	26.73	26.65	26.65
171190023	Illinois	Madison	35.81	30.23	30.23	29.50	29.50	29.43	29.43
420031301	Pennsylvania	Allegheny	35.65	28.05	28.05	26.15	26.15	25.86	25.86
391130032	Ohio	Montgomery	35.61	25.99	25.99	24.62	24.62	24.54	24.54
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 25. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional New York Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without New York Budget Increase	\$500/ton With New York Budget Increase	\$2,300/ton Without New York Budget Increase	\$2,300/ton With New York Budget Increase	Control Scenario Without New York Budget Increase	Control Scenario With New York Budget Increase
<b>Additional Emissions Added to New York (tons)</b>				0	5,444	0	5,444	0	5,444
420030064	Pennsylvania	Allegheny	17.94	15.78	15.79	15.03	15.03	14.87	14.87
390350038	Ohio	Cuyahoga	15.99	14.10	14.11	13.60	13.60	13.52	13.52
10730023	Alabama	Jefferson	16.15	14.33	14.33	14.31	14.31	13.90	13.90
390618001	Ohio	Hamilton	16.01	13.55	13.55	13.01	13.01	12.97	12.97
261630033	Michigan	Wayne	15.73	14.36	14.36	13.87	13.87	13.78	13.78
390350060	Ohio	Cuyahoga	15.67	13.76	13.76	13.25	13.26	13.16	13.17
390610014	Ohio	Hamilton	15.76	13.29	13.29	12.75	12.75	12.71	12.71
390610042	Ohio	Hamilton	15.40	12.97	12.97	12.44	12.44	12.37	12.37
171191007	Illinois	Madison	15.46	13.85	13.85	13.57	13.57	13.40	13.40
10732003	Alabama	Jefferson	15.16	13.55	13.55	13.52	13.52	13.13	13.13
390350045	Ohio	Cuyahoga	15.14	13.24	13.24	12.73	12.74	12.65	12.65
180970081	Indiana	Marion	14.86	12.69	12.69	12.27	12.27	12.25	12.25
131210039	Georgia	Fulton	15.07	13.35	13.35	13.20	13.20	13.08	13.08
390617001	Ohio	Hamilton	14.74	12.30	12.30	11.76	11.76	11.72	11.72
390350065	Ohio	Cuyahoga	14.67	12.79	12.79	12.28	12.29	12.20	12.20
180970083	Indiana	Marion	14.71	12.54	12.54	12.12	12.12	12.10	12.10

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 26. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional New York Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without New York Budget Increase	\$500/ton With New York Budget Increase	\$2,300/ton Without New York Budget Increase	\$2,300/ton With New York Budget Increase	Control Scenario Without New York Budget Increase	Control Scenario With New York Budget Increase
<b>Additional Emissions Added to New York (tons)</b>				0	5,444	0	5,444	0	5,444
420030064	Pennsylvania	Allegheny	18.33	16.17	16.18	15.42	15.42	15.26	15.26
390350038	Ohio	Cuyahoga	16.66	14.77	14.78	14.27	14.27	14.19	14.19
10730023	Alabama	Jefferson	16.46	14.64	14.64	14.62	14.62	14.21	14.21
390618001	Ohio	Hamilton	16.33	13.87	13.87	13.33	13.33	13.29	13.29
261630033	Michigan	Wayne	16.32	14.95	14.95	14.46	14.46	14.37	14.37
390350060	Ohio	Cuyahoga	16.18	14.27	14.27	13.76	13.77	13.67	13.68
390610014	Ohio	Hamilton	15.98	13.51	13.51	12.97	12.97	12.93	12.93
390610042	Ohio	Hamilton	15.77	13.34	13.34	12.81	12.81	12.74	12.74
171191007	Illinois	Madison	15.73	14.12	14.12	13.84	13.84	13.67	13.67
10732003	Alabama	Jefferson	15.64	14.03	14.03	14.00	14.00	13.61	13.61
390350045	Ohio	Cuyahoga	15.61	13.71	13.71	13.20	13.21	13.12	13.12
180970081	Indiana	Marion	15.16	12.99	12.99	12.57	12.57	12.55	12.55
131210039	Georgia	Fulton	15.10	13.38	13.38	13.23	13.23	13.11	13.11
390617001	Ohio	Hamilton	15.10	12.66	12.66	12.12	12.12	12.08	12.08
390350065	Ohio	Cuyahoga	15.10	13.22	13.22	12.71	12.72	12.63	12.63
180970083	Indiana	Marion	15.06	12.89	12.89	12.47	12.47	12.45	12.45

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 27. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional New York Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without New York Budget Increase	\$500/ton With New York Budget Increase	\$2,300/ton Without New York Budget Increase	\$2,300/ton With New York Budget Increase	Control Scenario Without New York Budget Increase	Control Scenario With New York Budget Increase
<b>Additional Emissions Added to New York (tons)</b>				0	5,444	0	5,444	0	5,444
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.57	45.54	45.54	45.46	45.46
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.19	30.25	30.25	29.88	29.89
390350038**	Ohio	Cuyahoga	39.46	34.18	34.18	33.51	33.51	33.47	33.47
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.93	33.88	33.89
390350060	Ohio	Cuyahoga	37.78	31.50	31.51	30.61	30.62	30.51	30.52
170311016**	Illinois	Cook	37.58	34.14	34.14	33.14	33.14	32.97	32.97
261630033**	Michigan	Wayne	39.48	36.32	36.32	35.01	35.01	34.76	34.76
180890022**	Indiana	Lake	34.94	32.80	32.80	32.39	32.39	32.31	32.32
540090011	West Virginia	Brooke	37.57	30.60	30.60	29.07	29.07	28.84	28.84
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87	34.87
390350045	Ohio	Cuyahoga	34.80	27.69	27.69	26.30	26.31	26.24	26.24
390811001	Ohio	Jefferson	34.56	27.64	27.64	25.79	25.79	25.57	25.58
261630019**	Michigan	Wayne	37.34	35.28	35.28	34.93	34.93	34.88	34.88
390350065	Ohio	Cuyahoga	34.91	27.66	27.66	26.11	26.12	25.96	25.97
170313301	Illinois	Cook	34.97	31.11	31.11	30.54	30.54	30.36	30.36
420070014	Pennsylvania	Beaver	36.21	29.28	29.28	27.59	27.59	27.40	27.40
420033007	Pennsylvania	Allegheny	32.40	26.27	26.27	24.88	24.88	24.78	24.79
010730023	Alabama	Jefferson	36.96	31.93	31.93	31.61	31.61	31.11	31.11
550790026	Wisconsin	Milwaukee	33.62	30.51	30.51	30.18	30.18	30.11	30.11
180970043	Indiana	Marion	35.76	28.64	28.64	27.16	27.16	27.14	27.14
261470005	Michigan	St Clair	36.23	33.35	33.36	32.78	32.79	32.68	32.69
550790043	Wisconsin	Milwaukee	36.21	32.53	32.53	31.89	31.89	31.84	31.84
180890026	Indiana	Lake	34.08	30.91	30.91	30.52	30.52	30.49	30.49
180970081	Indiana	Marion	35.85	28.44	28.44	27.35	27.35	27.30	27.31
180970066	Indiana	Marion	35.73	29.22	29.22	28.13	28.13	28.10	28.11
171191007	Illinois	Madison	36.59	29.94	29.94	29.34	29.34	29.34	29.34
550790010	Wisconsin	Milwaukee	35.47	31.54	31.54	30.86	30.86	30.86	30.86
390170003	Ohio	Butler	34.40	28.07	28.07	26.49	26.49	26.48	26.49
170316005	Illinois	Cook	34.12	32.72	32.72	32.41	32.41	32.04	32.04
420031008	Pennsylvania	Allegheny	35.04	26.95	26.95	24.69	24.69	24.49	24.49
261610008	Michigan	Washtenaw	35.05	29.40	29.41	28.55	28.55	28.47	28.48
170312001	Illinois	Cook	33.62	29.85	29.85	29.58	29.58	29.51	29.51
170310052	Illinois	Cook	34.94	30.12	30.12	29.79	29.79	29.70	29.70
421330008	Pennsylvania	York	33.38	31.60	31.61	31.03	31.04	30.93	30.93
261630015	Michigan	Wayne	35.55	32.23	32.23	31.10	31.10	31.02	31.03
010732003	Alabama	Jefferson	35.31	31.42	31.42	31.10	31.10	30.63	30.63
390618001	Ohio	Hamilton	35.29	27.63	27.63	26.11	26.11	25.97	25.97
171190023	Illinois	Madison	35.11	29.23	29.23	28.49	28.49	28.43	28.43
420031301	Pennsylvania	Allegheny	33.95	27.16	27.16	25.21	25.21	24.97	24.97
391130032	Ohio	Montgomery	33.68	24.40	24.40	23.15	23.15	23.10	23.10
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 28. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional New York Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without New York Budget Increase	\$500/ton With New York Budget Increase	\$2,300/ton Without New York Budget Increase	\$2,300/ton With New York Budget Increase	Control Scenario Without New York Budget Increase	Control Scenario With New York Budget Increase
<b>Additional Emissions Added to New York (tons)</b>			0	5,444	0	5,444	0	5,444	0
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.72	48.63	48.63	48.53	48.54
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.85	34.80	34.80	34.29	34.30
390350038**	Ohio	Cuyahoga	41.84	35.93	35.93	35.41	35.41	35.39	35.40
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.66	35.66	35.61	35.61
390350060	Ohio	Cuyahoga	40.85	33.70	33.70	33.04	33.05	32.95	32.95
170311016**	Illinois	Cook	40.44	37.41	37.41	36.55	36.55	36.41	36.42
261630033**	Michigan	Wayne	39.81	36.59	36.60	35.23	35.24	34.97	34.97
180890022**	Indiana	Lake	39.58	37.01	37.01	36.51	36.51	36.31	36.31
540090011	West Virginia	Brooke	38.39	32.23	32.23	30.02	30.02	29.64	29.65
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.49	29.49	27.60	27.61	27.44	27.44
390811001	Ohio	Jefferson	37.88	30.27	30.27	28.03	28.03	27.76	27.77
261630019**	Michigan	Wayne	37.83	36.21	36.21	35.83	35.83	35.75	35.75
390350065	Ohio	Cuyahoga	37.67	28.80	28.81	27.00	27.01	26.82	26.83
170313301	Illinois	Cook	37.67	33.36	33.36	32.85	32.85	32.71	32.71
420070014	Pennsylvania	Beaver	37.42	30.46	30.46	28.70	28.70	28.50	28.50
420033007	Pennsylvania	Allegheny	37.40	30.73	30.73	28.81	28.81	28.64	28.64
010730023	Alabama	Jefferson	37.33	32.50	32.50	32.12	32.12	31.57	31.58
550790026	Wisconsin	Milwaukee	37.24	33.57	33.57	33.24	33.24	33.14	33.14
180970043	Indiana	Marion	37.20	29.00	29.00	27.82	27.82	27.77	27.77
261470005	Michigan	St Clair	37.14	34.16	34.17	33.38	33.39	33.30	33.30
550790043	Wisconsin	Milwaukee	37.10	34.26	34.26	33.96	33.96	33.95	33.96
180890026	Indiana	Lake	37.06	33.67	33.67	33.37	33.37	33.39	33.39
180970081	Indiana	Marion	36.96	28.83	28.83	27.59	27.59	27.55	27.55
180970066	Indiana	Marion	36.92	30.40	30.40	29.13	29.13	29.11	29.12
171191007	Illinois	Madison	36.83	31.20	31.20	30.68	30.68	30.67	30.67
550790010	Wisconsin	Milwaukee	36.71	33.50	33.50	33.16	33.16	33.17	33.17
390170003	Ohio	Butler	36.59	28.71	28.71	27.33	27.33	27.30	27.30
170316005	Illinois	Cook	36.42	35.10	35.10	34.82	34.82	34.47	34.47
420031008	Pennsylvania	Allegheny	36.35	28.15	28.15	25.62	25.62	25.40	25.40
261610008	Michigan	Washtenaw	36.32	30.20	30.21	29.33	29.34	29.27	29.27
170312001	Illinois	Cook	36.12	32.71	32.71	32.34	32.34	32.22	32.22
170310052	Illinois	Cook	36.07	30.62	30.62	30.32	30.32	30.21	30.21
421330008	Pennsylvania	York	36.06	34.56	34.56	33.92	33.92	33.80	33.81
261630015	Michigan	Wayne	36.00	33.04	33.04	31.99	31.99	31.92	31.92
010732003	Alabama	Jefferson	35.94	32.23	32.23	31.91	31.91	31.46	31.46
390618001	Ohio	Hamilton	35.85	28.23	28.23	26.73	26.73	26.65	26.65
171190023	Illinois	Madison	35.81	30.23	30.23	29.50	29.50	29.43	29.43
420031301	Pennsylvania	Allegheny	35.65	28.05	28.05	26.15	26.15	25.86	25.86
391130032	Ohio	Montgomery	35.61	25.99	25.99	24.62	24.62	24.54	24.54
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 29. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Ohio Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Ohio Budget Increase	\$500/ton With Ohio Budget Increase	\$2,300/ton Without Ohio Budget Increase	\$2,300/ton With Ohio Budget Increase	Control Scenario Without Ohio Budget Increase	Control Scenario With Ohio Budget Increase
<b>Additional Emissions Added to Ohio (tons)</b>				0	5,163	0	5,163	0	5,163
420030064	Pennsylvania	Allegheny	17.94	15.78	15.79	15.03	15.03	14.87	14.87
390350038	Ohio	Cuyahoga	15.99	14.10	14.11	13.60	13.61	13.52	13.52
10730023	Alabama	Jefferson	16.15	14.33	14.33	14.31	14.31	13.90	13.90
390618001	Ohio	Hamilton	16.01	13.55	13.56	13.01	13.02	12.97	12.98
261630033	Michigan	Wayne	15.73	14.36	14.36	13.87	13.87	13.78	13.78
390350060	Ohio	Cuyahoga	15.67	13.76	13.77	13.25	13.26	13.16	13.17
390610014	Ohio	Hamilton	15.76	13.29	13.30	12.75	12.76	12.71	12.72
390610042	Ohio	Hamilton	15.40	12.97	12.98	12.44	12.45	12.37	12.38
171191007	Illinois	Madison	15.46	13.85	13.85	13.57	13.58	13.40	13.40
10732003	Alabama	Jefferson	15.16	13.55	13.55	13.52	13.52	13.13	13.13
390350045	Ohio	Cuyahoga	15.14	13.24	13.25	12.73	12.74	12.65	12.65
180970081	Indiana	Marion	14.86	12.69	12.69	12.27	12.27	12.25	12.25
131210039	Georgia	Fulton	15.07	13.35	13.35	13.20	13.20	13.08	13.08
390617001	Ohio	Hamilton	14.74	12.30	12.31	11.76	11.77	11.72	11.73
390350065	Ohio	Cuyahoga	14.67	12.79	12.80	12.28	12.29	12.20	12.20
180970083	Indiana	Marion	14.71	12.54	12.54	12.12	12.12	12.10	12.10

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 30. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional Ohio Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Ohio Budget Increase	\$500/ton With Ohio Budget Increase	\$2,300/ton Without Ohio Budget Increase	\$2,300/ton With Ohio Budget Increase	Control Scenario Without Ohio Budget Increase	Control Scenario With Ohio Budget Increase
<b>Additional Emissions Added to Ohio (tons)</b>				0	5,163	0	5,163	0	5,163
420030064	Pennsylvania	Allegheny	18.33	16.17	16.18	15.42	15.42	15.26	15.26
390350038	Ohio	Cuyahoga	16.66	14.77	14.78	14.27	14.28	14.19	14.19
10730023	Alabama	Jefferson	16.46	14.64	14.64	14.62	14.62	14.21	14.21
390618001	Ohio	Hamilton	16.33	13.87	13.88	13.33	13.34	13.29	13.30
261630033	Michigan	Wayne	16.32	14.95	14.95	14.46	14.46	14.37	14.37
390350060	Ohio	Cuyahoga	16.18	14.27	14.28	13.76	13.77	13.67	13.68
390610014	Ohio	Hamilton	15.98	13.51	13.52	12.97	12.98	12.93	12.94
390610042	Ohio	Hamilton	15.77	13.34	13.35	12.81	12.82	12.74	12.75
171191007	Illinois	Madison	15.73	14.12	14.12	13.84	13.85	13.67	13.67
10732003	Alabama	Jefferson	15.64	14.03	14.03	14.00	14.00	13.61	13.61
390350045	Ohio	Cuyahoga	15.61	13.71	13.72	13.20	13.21	13.12	13.12
180970081	Indiana	Marion	15.16	12.99	12.99	12.57	12.57	12.55	12.55
131210039	Georgia	Fulton	15.10	13.38	13.38	13.23	13.23	13.11	13.11
390617001	Ohio	Hamilton	15.10	12.66	12.67	12.12	12.13	12.08	12.09
390350065	Ohio	Cuyahoga	15.10	13.22	13.23	12.71	12.72	12.63	12.63
180970083	Indiana	Marion	15.06	12.89	12.89	12.47	12.47	12.45	12.45

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 31. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Ohio Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Ohio Budget Increase	\$500/ton With Ohio Budget Increase	\$2,300/ton Without Ohio Budget Increase	\$2,300/ton With Ohio Budget Increase	Control Scenario Without Ohio Budget Increase	Control Scenario With Ohio Budget Increase
<b>Additional Emissions Added to Ohio (tons)</b>			0	5,163	0	5,163	0	5,163	5,163
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.59	45.54	45.55	45.46	45.47
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.20	30.25	30.27	29.88	29.90
390350038**	Ohio	Cuyahoga	39.46	34.18	34.19	33.51	33.53	33.47	33.48
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.93	33.88	33.89
390350060	Ohio	Cuyahoga	37.78	31.50	31.52	30.61	30.63	30.51	30.52
170311016**	Illinois	Cook	37.58	34.14	34.15	33.14	33.15	32.97	32.98
261630033**	Michigan	Wayne	39.48	36.32	36.33	35.01	35.02	34.76	34.77
180890022**	Indiana	Lake	34.94	32.80	32.80	32.39	32.39	32.31	32.32
540090011	West Virginia	Brooke	37.57	30.60	30.62	29.07	29.09	28.84	28.86
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87	34.87
390350045	Ohio	Cuyahoga	34.80	27.69	27.72	26.30	26.32	26.24	26.25
390811001	Ohio	Jefferson	34.56	27.64	27.66	25.79	25.81	25.57	25.59
261630019**	Michigan	Wayne	37.34	35.28	35.28	34.93	34.93	34.88	34.88
390350065	Ohio	Cuyahoga	34.91	27.66	27.68	26.11	26.14	25.96	25.99
170313301	Illinois	Cook	34.97	31.11	31.12	30.54	30.55	30.36	30.37
420070014	Pennsylvania	Beaver	36.21	29.28	29.29	27.59	27.60	27.40	27.41
420033007	Pennsylvania	Allegheny	32.40	26.27	26.28	24.88	24.89	24.78	24.79
010730023	Alabama	Jefferson	36.96	31.93	31.94	31.61	31.62	31.11	31.12
550790026	Wisconsin	Milwaukee	33.62	30.51	30.51	30.18	30.18	30.11	30.11
180970043	Indiana	Marion	35.76	28.64	28.65	27.16	27.17	27.14	27.15
261470005	Michigan	St Clair	36.23	33.35	33.36	32.78	32.79	32.68	32.69
550790043	Wisconsin	Milwaukee	36.21	32.53	32.54	31.89	31.89	31.84	31.85
180890026	Indiana	Lake	34.08	30.91	30.91	30.52	30.53	30.49	30.49
180970081	Indiana	Marion	35.85	28.44	28.44	27.35	27.36	27.30	27.31
180970066	Indiana	Marion	35.73	29.22	29.23	28.13	28.14	28.10	28.11
171191007	Illinois	Madison	36.59	29.94	29.94	29.34	29.35	29.34	29.34
550790010	Wisconsin	Milwaukee	35.47	31.54	31.54	30.86	30.86	30.86	30.86
390170003	Ohio	Butler	34.40	28.07	28.09	26.49	26.51	26.48	26.50
170316005	Illinois	Cook	34.12	32.72	32.73	32.41	32.42	32.04	32.04
420031008	Pennsylvania	Allegheny	35.04	26.95	26.97	24.69	24.71	24.49	24.50
261610008	Michigan	Washtenaw	35.05	29.40	29.42	28.55	28.55	28.47	28.48
170312001	Illinois	Cook	33.62	29.85	29.85	29.58	29.58	29.51	29.51
170310052	Illinois	Cook	34.94	30.12	30.12	29.79	29.79	29.70	29.70
421330008	Pennsylvania	York	33.38	31.60	31.61	31.03	31.04	30.93	30.93
261630015	Michigan	Wayne	35.55	32.23	32.24	31.10	31.10	31.02	31.03
010732003	Alabama	Jefferson	35.31	31.42	31.42	31.10	31.10	30.63	30.63
390618001	Ohio	Hamilton	35.29	27.63	27.65	26.11	26.13	25.97	25.99
171190023	Illinois	Madison	35.11	29.23	29.24	28.49	28.50	28.43	28.43
420031301	Pennsylvania	Allegheny	33.95	27.16	27.18	25.21	25.23	24.97	24.98
391130032	Ohio	Montgomery	33.68	24.40	24.42	23.15	23.16	23.10	23.11
420030116	Pennsylvania	Allegheny	35.59	27.97	27.99	26.34	26.35	26.14	26.16

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 32. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional Ohio Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without Ohio Budget Increase	\$500/ton With Ohio Budget Increase	\$2,300/ton Without Ohio Budget Increase	\$2,300/ton With Ohio Budget Increase	Control Scenario Without Ohio Budget Increase	Control Scenario With Ohio Budget Increase
<b>Additional Emissions Added to Ohio (tons)</b>			0	5,163	0	5,163	0	5,163	5,163
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.73	48.63	48.65	48.53	48.55
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.87	34.80	34.82	34.29	34.31
390350038**	Ohio	Cuyahoga	41.84	35.93	35.94	35.41	35.42	35.39	35.41
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.66	35.66	35.61	35.61
390350060	Ohio	Cuyahoga	40.85	33.70	33.71	33.04	33.06	32.95	32.96
170311016**	Illinois	Cook	40.44	37.41	37.42	36.55	36.55	36.41	36.42
261630033**	Michigan	Wayne	39.81	36.59	36.61	35.23	35.25	34.97	34.98
180890022**	Indiana	Lake	39.58	37.01	37.01	36.51	36.52	36.31	36.32
540090011	West Virginia	Brooke	38.39	32.23	32.26	30.02	30.05	29.64	29.67
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.49	29.52	27.60	27.62	27.44	27.45
390811001	Ohio	Jefferson	37.88	30.27	30.30	28.03	28.05	27.76	27.79
261630019**	Michigan	Wayne	37.83	36.21	36.21	35.83	35.83	35.75	35.75
390350065	Ohio	Cuyahoga	37.67	28.80	28.83	27.00	27.03	26.82	26.85
170313301	Illinois	Cook	37.67	33.36	33.37	32.85	32.85	32.71	32.71
420070014	Pennsylvania	Beaver	37.42	30.46	30.48	28.70	28.71	28.50	28.51
420033007	Pennsylvania	Allegheny	37.40	30.73	30.75	28.81	28.82	28.64	28.65
010730023	Alabama	Jefferson	37.33	32.50	32.51	32.12	32.12	31.57	31.58
550790026	Wisconsin	Milwaukee	37.24	33.57	33.57	33.24	33.24	33.14	33.14
180970043	Indiana	Marion	37.20	29.00	29.01	27.82	27.83	27.77	27.78
261470005	Michigan	St Clair	37.14	34.16	34.17	33.38	33.39	33.30	33.30
550790043	Wisconsin	Milwaukee	37.10	34.26	34.26	33.96	33.96	33.95	33.96
180890026	Indiana	Lake	37.06	33.67	33.67	33.37	33.37	33.39	33.39
180970081	Indiana	Marion	36.96	28.83	28.84	27.59	27.60	27.55	27.56
180970066	Indiana	Marion	36.92	30.40	30.41	29.13	29.14	29.11	29.12
171191007	Illinois	Madison	36.83	31.20	31.21	30.68	30.69	30.67	30.67
550790010	Wisconsin	Milwaukee	36.71	33.50	33.50	33.16	33.16	33.17	33.17
390170003	Ohio	Butler	36.59	28.71	28.72	27.33	27.34	27.30	27.31
170316005	Illinois	Cook	36.42	35.10	35.10	34.82	34.82	34.47	34.47
420031008	Pennsylvania	Allegheny	36.35	28.15	28.18	25.62	25.65	25.40	25.42
261610008	Michigan	Washtenaw	36.32	30.20	30.22	29.33	29.34	29.27	29.27
170312001	Illinois	Cook	36.12	32.71	32.71	32.34	32.34	32.22	32.22
170310052	Illinois	Cook	36.07	30.62	30.62	30.32	30.32	30.21	30.21
421330008	Pennsylvania	York	36.06	34.56	34.56	33.92	33.92	33.80	33.80
261630015	Michigan	Wayne	36.00	33.04	33.05	31.99	32.00	31.92	31.92
010732003	Alabama	Jefferson	35.94	32.23	32.23	31.91	31.92	31.46	31.46
390618001	Ohio	Hamilton	35.85	28.23	28.26	26.73	26.74	26.65	26.66
171190023	Illinois	Madison	35.81	30.23	30.24	29.50	29.51	29.43	29.44
420031301	Pennsylvania	Allegheny	35.65	28.05	28.07	26.15	26.16	25.86	25.87
391130032	Ohio	Montgomery	35.61	25.99	26.01	24.62	24.63	24.54	24.55
420030116	Pennsylvania	Allegheny	35.59	27.97	27.99	26.34	26.35	26.14	26.16

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 33. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional South Carolina Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without South Carolina Budget Increase	\$500/ton With South Carolina Budget Increase	\$2,300/ton Without South Carolina Budget Increase	\$2,300/ton With South Carolina Budget Increase	Control Scenario Without South Carolina Budget Increase	Control Scenario With South Carolina Budget Increase
<b>Additional Emissions Added to South Carolina (tons)</b>				0	8,013	0	8,013	0	8,013
420030064	Pennsylvania	Allegheny	17.94	15.78	15.78	15.03	15.03	14.87	14.87
390350038	Ohio	Cuyahoga	15.99	14.10	14.10	13.60	13.60	13.52	13.52
10730023	Alabama	Jefferson	16.15	14.33	14.33	14.31	14.31	13.90	13.90
390618001	Ohio	Hamilton	16.01	13.55	13.55	13.01	13.01	12.97	12.97
261630033	Michigan	Wayne	15.73	14.36	14.36	13.87	13.87	13.78	13.78
390350060	Ohio	Cuyahoga	15.67	13.76	13.76	13.25	13.25	13.16	13.17
390610014	Ohio	Hamilton	15.76	13.29	13.29	12.75	12.75	12.71	12.71
390610042	Ohio	Hamilton	15.40	12.97	12.97	12.44	12.44	12.37	12.37
171191007	Illinois	Madison	15.46	13.85	13.85	13.57	13.57	13.40	13.40
10732003	Alabama	Jefferson	15.16	13.55	13.55	13.52	13.52	13.13	13.13
390350045	Ohio	Cuyahoga	15.14	13.24	13.24	12.73	12.73	12.65	12.65
180970081	Indiana	Marion	14.86	12.69	12.69	12.27	12.27	12.25	12.25
131210039	Georgia	Fulton	15.07	13.35	13.35	13.20	13.20	13.08	13.08
390617001	Ohio	Hamilton	14.74	12.30	12.30	11.76	11.76	11.72	11.72
390350065	Ohio	Cuyahoga	14.67	12.79	12.79	12.28	12.28	12.20	12.20
180970083	Indiana	Marion	14.71	12.54	12.54	12.12	12.12	12.10	12.10

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 34. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering Additional South Carolina Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without South Carolina Budget Increase	\$500/ton With South Carolina Budget Increase	\$2,300/ton Without South Carolina Budget Increase	\$2,300/ton With South Carolina Budget Increase	Control Scenario Without South Carolina Budget Increase	Control Scenario With South Carolina Budget Increase
<b>Additional Emissions Added to South Carolina (tons)</b>				0	8,013	0	8,013	0	8,013
420030064	Pennsylvania	Allegheny	18.33	16.17	16.17	15.42	15.42	15.26	15.26
390350038	Ohio	Cuyahoga	16.66	14.77	14.77	14.27	14.27	14.19	14.19
10730023	Alabama	Jefferson	16.46	14.64	14.64	14.62	14.62	14.21	14.21
390618001	Ohio	Hamilton	16.33	13.87	13.87	13.33	13.33	13.29	13.29
261630033	Michigan	Wayne	16.32	14.95	14.95	14.46	14.46	14.37	14.37
390350060	Ohio	Cuyahoga	16.18	14.27	14.27	13.76	13.76	13.67	13.68
390610014	Ohio	Hamilton	15.98	13.51	13.51	12.97	12.97	12.93	12.93
390610042	Ohio	Hamilton	15.77	13.34	13.34	12.81	12.81	12.74	12.74
171191007	Illinois	Madison	15.73	14.12	14.12	13.84	13.84	13.67	13.67
10732003	Alabama	Jefferson	15.64	14.03	14.03	14.00	14.00	13.61	13.61
390350045	Ohio	Cuyahoga	15.61	13.71	13.71	13.20	13.20	13.12	13.12
180970081	Indiana	Marion	15.16	12.99	12.99	12.57	12.57	12.55	12.55
131210039	Georgia	Fulton	15.10	13.38	13.38	13.23	13.23	13.11	13.11
390617001	Ohio	Hamilton	15.10	12.66	12.66	12.12	12.12	12.08	12.08
390350065	Ohio	Cuyahoga	15.10	13.22	13.22	12.71	12.71	12.63	12.63
180970083	Indiana	Marion	15.06	12.89	12.89	12.47	12.47	12.45	12.45

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 35. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional South Carolina Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without South Carolina Budget Increase	\$500/ton With South Carolina Budget Increase	\$2,300/ton Without South Carolina Budget Increase	\$2,300/ton With South Carolina Budget Increase	Control Scenario Without South Carolina Budget Increase	Control Scenario With South Carolina Budget Increase
<b>Additional Emissions Added to South Carolina (tons)</b>				0	8,013	0	8,013	0	8,013
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.57	45.54	45.54	45.46	45.46
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.19	30.25	30.25	29.88	29.89
390350038**	Ohio	Cuyahoga	39.46	34.18	34.18	33.51	33.51	33.47	33.47
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.93	33.88	33.88
390350060	Ohio	Cuyahoga	37.78	31.50	31.50	30.61	30.61	30.51	30.51
170311016**	Illinois	Cook	37.58	34.14	34.14	33.14	33.14	32.97	32.97
261630033**	Michigan	Wayne	39.48	36.32	36.32	35.01	35.01	34.76	34.76
180890022**	Indiana	Lake	34.94	32.80	32.80	32.39	32.39	32.31	32.32
540090011	West Virginia	Brooke	37.57	30.60	30.60	29.07	29.07	28.84	28.84
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87	34.87
390350045	Ohio	Cuyahoga	34.80	27.69	27.69	26.30	26.30	26.24	26.24
390811001	Ohio	Jefferson	34.56	27.64	27.64	25.79	25.79	25.57	25.57
261630019**	Michigan	Wayne	37.34	35.28	35.28	34.93	34.93	34.88	34.88
390350065	Ohio	Cuyahoga	34.91	27.66	27.66	26.11	26.11	25.96	25.96
170313301	Illinois	Cook	34.97	31.11	31.11	30.54	30.54	30.36	30.36
420070014	Pennsylvania	Beaver	36.21	29.28	29.28	27.59	27.59	27.40	27.40
420033007	Pennsylvania	Allegheny	32.40	26.27	26.27	24.88	24.88	24.78	24.79
010730023	Alabama	Jefferson	36.96	31.93	31.93	31.61	31.61	31.11	31.12
550790026	Wisconsin	Milwaukee	33.62	30.51	30.51	30.18	30.18	30.11	30.11
180970043	Indiana	Marion	35.76	28.64	28.64	27.16	27.16	27.14	27.14
261470005	Michigan	St Clair	36.23	33.35	33.35	32.78	32.78	32.68	32.68
550790043	Wisconsin	Milwaukee	36.21	32.53	32.53	31.89	31.89	31.84	31.84
180890026	Indiana	Lake	34.08	30.91	30.91	30.52	30.52	30.49	30.49
180970081	Indiana	Marion	35.85	28.44	28.44	27.35	27.35	27.30	27.30
180970066	Indiana	Marion	35.73	29.22	29.22	28.13	28.13	28.10	28.10
171191007	Illinois	Madison	36.59	29.94	29.94	29.34	29.34	29.34	29.34
550790010	Wisconsin	Milwaukee	35.47	31.54	31.54	30.86	30.86	30.86	30.86
390170003	Ohio	Butler	34.40	28.07	28.07	26.49	26.49	26.48	26.48
170316005	Illinois	Cook	34.12	32.72	32.72	32.41	32.41	32.04	32.04
420031008	Pennsylvania	Allegheny	35.04	26.95	26.95	24.69	24.69	24.49	24.49
261610008	Michigan	Washtenaw	35.05	29.40	29.40	28.55	28.55	28.47	28.48
170312001	Illinois	Cook	33.62	29.85	29.85	29.58	29.58	29.51	29.51
170310052	Illinois	Cook	34.94	30.12	30.12	29.79	29.79	29.70	29.70
421330008	Pennsylvania	York	33.38	31.60	31.60	31.03	31.03	30.93	30.93
261630015	Michigan	Wayne	35.55	32.23	32.23	31.10	31.10	31.02	31.02
010732003	Alabama	Jefferson	35.31	31.42	31.42	31.10	31.10	30.63	30.63
390618001	Ohio	Hamilton	35.29	27.63	27.63	26.11	26.11	25.97	25.97
171190023	Illinois	Madison	35.11	29.23	29.23	28.49	28.49	28.43	28.43
420031301	Pennsylvania	Allegheny	33.95	27.16	27.16	25.21	25.21	24.97	24.97
391130032	Ohio	Montgomery	33.68	24.40	24.40	23.15	23.15	23.10	23.10
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 36. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering Additional South Carolina Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without South Carolina Budget Increase	\$500/ton With South Carolina Budget Increase	\$2,300/ton Without South Carolina Budget Increase	\$2,300/ton With South Carolina Budget Increase	Control Scenario Without South Carolina Budget Increase	Control Scenario With South Carolina Budget Increase
<b>Additional Emissions Added to South Carolina (tons)</b>				0	8,013	0	8,013	0	8,013
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.72	48.63	48.63	48.53	48.53
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.85	34.80	34.80	34.29	34.30
390350038**	Ohio	Cuyahoga	41.84	35.93	35.93	35.41	35.41	35.39	35.39
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.66	35.66	35.61	35.61
390350060	Ohio	Cuyahoga	40.85	33.70	33.70	33.04	33.04	32.95	32.95
170311016**	Illinois	Cook	40.44	37.41	37.41	36.55	36.55	36.41	36.42
261630033**	Michigan	Wayne	39.81	36.59	36.59	35.23	35.23	34.97	34.97
180890022**	Indiana	Lake	39.58	37.01	37.01	36.51	36.51	36.31	36.31
540090011	West Virginia	Brooke	38.39	32.23	32.23	30.02	30.02	29.64	29.64
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.49	29.49	27.60	27.60	27.44	27.44
390811001	Ohio	Jefferson	37.88	30.27	30.27	28.03	28.03	27.76	27.77
261630019**	Michigan	Wayne	37.83	36.21	36.21	35.83	35.83	35.75	35.75
390350065	Ohio	Cuyahoga	37.67	28.80	28.80	27.00	27.00	26.82	26.83
170313301	Illinois	Cook	37.67	33.36	33.36	32.85	32.85	32.71	32.71
420070014	Pennsylvania	Beaver	37.42	30.46	30.46	28.70	28.70	28.50	28.50
420033007	Pennsylvania	Allegheny	37.40	30.73	30.73	28.81	28.81	28.64	28.64
010730023	Alabama	Jefferson	37.33	32.50	32.50	32.12	32.12	31.57	31.58
550790026	Wisconsin	Milwaukee	37.24	33.57	33.57	33.24	33.24	33.14	33.14
180970043	Indiana	Marion	37.20	29.00	29.00	27.82	27.82	27.77	27.77
261470005	Michigan	St Clair	37.14	34.16	34.16	33.38	33.38	33.30	33.30
550790043	Wisconsin	Milwaukee	37.10	34.26	34.26	33.96	33.96	33.95	33.95
180890026	Indiana	Lake	37.06	33.67	33.67	33.37	33.37	33.39	33.39
180970081	Indiana	Marion	36.96	28.83	28.83	27.59	27.59	27.55	27.55
180970066	Indiana	Marion	36.92	30.40	30.40	29.13	29.13	29.11	29.11
171191007	Illinois	Madison	36.83	31.20	31.20	30.68	30.68	30.67	30.67
550790010	Wisconsin	Milwaukee	36.71	33.50	33.50	33.16	33.16	33.17	33.17
390170003	Ohio	Butler	36.59	28.71	28.71	27.33	27.33	27.30	27.30
170316005	Illinois	Cook	36.42	35.10	35.10	34.82	34.82	34.47	34.47
420031008	Pennsylvania	Allegheny	36.35	28.15	28.15	25.62	25.62	25.40	25.40
261610008	Michigan	Washtenaw	36.32	30.20	30.20	29.33	29.33	29.27	29.27
170312001	Illinois	Cook	36.12	32.71	32.71	32.34	32.34	32.22	32.22
170310052	Illinois	Cook	36.07	30.62	30.62	30.32	30.32	30.21	30.21
421330008	Pennsylvania	York	36.06	34.56	34.56	33.92	33.92	33.80	33.80
261630015	Michigan	Wayne	36.00	33.04	33.04	31.99	31.99	31.92	31.92
010732003	Alabama	Jefferson	35.94	32.23	32.23	31.91	31.91	31.46	31.47
390618001	Ohio	Hamilton	35.85	28.23	28.23	26.73	26.73	26.65	26.65
171190023	Illinois	Madison	35.81	30.23	30.23	29.50	29.50	29.43	29.43
420031301	Pennsylvania	Allegheny	35.65	28.05	28.05	26.15	26.15	25.86	25.86
391130032	Ohio	Montgomery	35.61	25.99	25.99	24.62	24.62	24.54	24.54
420030116	Pennsylvania	Allegheny	35.59	27.97	27.97	26.34	26.34	26.14	26.14

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 37. Average Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering the Cumulative Effects of Additional Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ )							
				\$500/ton Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$500/ton With GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$2,300/ton Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$2,300/ton With GA, IN, KS, NE, NY, OH, and SC Budget Increases	Control Scenario Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	Control Scenario With GA, IN, KS, NE, NY, OH, and SC Budget Increases		
<b>Additional Emissions Added to Georgia (tons)</b>			0	40,334	0	40,334	0	40,334	40,334		
<b>Additional Emissions Added to Indiana (tons)</b>			0	5,338	0	5,338	0	5,338	5,338		
<b>Additional Emissions Added to Kansas (tons)</b>			0	452	0	452	0	452	452		
<b>Additional Emissions Added to Nebraska (tons)</b>			0	3,110	0	3,110	0	3,110	3,110		
<b>Additional Emissions Added to New York (tons)</b>			0	5,444	0	5,444	0	5,444	5,444		
<b>Additional Emissions Added to Ohio (tons)</b>			0	5,163	0	5,163	0	5,163	5,163		
<b>Additional Emissions Added to South Carolina (tons)</b>			0	8,013	0	8,013	0	8,013	8,013		
420030064	Pennsylvania	Allegheny	17.94	15.78	15.79	15.03	15.04	14.87	14.88		
390350038	Ohio	Cuyahoga	15.99	14.10	14.12	13.60	13.62	13.52	13.53		
10730023	Alabama	Jefferson	16.15	14.33	14.36	14.31	14.34	13.90	13.93		
390618001	Ohio	Hamilton	16.01	13.55	13.56	13.01	13.02	12.97	12.99		
261630033	Michigan	Wayne	15.73	14.36	14.36	13.87	13.88	13.78	13.79		
390350060	Ohio	Cuyahoga	15.67	13.76	13.77	13.25	13.27	13.16	13.18		
390610014	Ohio	Hamilton	15.76	13.29	13.31	12.75	12.76	12.71	12.74		
390610042	Ohio	Hamilton	15.40	12.97	12.99	12.44	12.46	12.37	12.39		
171191007	Illinois	Madison	15.46	13.85	13.85	13.57	13.58	13.40	13.41		
10732003	Alabama	Jefferson	15.16	13.55	13.58	13.52	13.55	13.13	13.16		
390350045	Ohio	Cuyahoga	15.14	13.24	13.25	12.73	12.75	12.65	12.66		
180970081	Indiana	Marion	14.86	12.69	12.70	12.27	12.28	12.25	12.27		
131210039	Georgia	Fulton	15.07	13.35	13.43	13.20	13.28	13.08	13.16		
390617001	Ohio	Hamilton	14.74	12.30	12.31	11.76	11.77	11.72	11.74		
390350065	Ohio	Cuyahoga	14.67	12.79	12.80	12.28	12.30	12.20	12.21		
180970083	Indiana	Marion	14.71	12.54	12.55	12.12	12.13	12.10	12.12		

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 38. Maximum Annual PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\* – Considering the Cumulative Effects of Additional Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum Annual PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$500/ton With GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$2,300/ton Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$2,300/ton With GA, IN, KS, NE, NY, OH, and SC Budget Increases	Control Scenario Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	Control Scenario With GA, IN, KS, NE, NY, OH, and SC Budget Increases
<b>Additional Emissions Added to Georgia (tons)</b>				0	40,334	0	40,334	0	40,334
<b>Additional Emissions Added to Indiana (tons)</b>				0	5,338	0	5,338	0	5,338
<b>Additional Emissions Added to Kansas (tons)</b>				0	452	0	452	0	452
<b>Additional Emissions Added to Nebraska (tons)</b>				0	3,110	0	3,110	0	3,110
<b>Additional Emissions Added to New York (tons)</b>				0	5,444	0	5,444	0	5,444
<b>Additional Emissions Added to Ohio (tons)</b>				0	5,163	0	5,163	0	5,163
<b>Additional Emissions Added to South Carolina (tons)</b>				0	8,013	0	8,013	0	8,013
420030064	Pennsylvania	Allegheny	18.33	16.17	16.18	15.42	15.43	15.26	15.27
390350038	Ohio	Cuyahoga	16.66	14.77	14.79	14.27	14.29	14.19	14.20
10730023	Alabama	Jefferson	16.46	14.64	14.67	14.62	14.65	14.21	14.24
390618001	Ohio	Hamilton	16.33	13.87	13.88	13.33	13.34	13.29	13.31
261630033	Michigan	Wayne	16.32	14.95	14.95	14.46	14.47	14.37	14.38
390350060	Ohio	Cuyahoga	16.18	14.27	14.28	13.76	13.78	13.67	13.69
390610014	Ohio	Hamilton	15.98	13.51	13.53	12.97	12.98	12.93	12.96
390610042	Ohio	Hamilton	15.77	13.34	13.36	12.81	12.83	12.74	12.76
171191007	Illinois	Madison	15.73	14.12	14.12	13.84	13.85	13.67	13.68
10732003	Alabama	Jefferson	15.64	14.03	14.06	14.00	14.03	13.61	13.64
390350045	Ohio	Cuyahoga	15.61	13.71	13.72	13.20	13.22	13.12	13.13
180970081	Indiana	Marion	15.16	12.99	13.00	12.57	12.58	12.55	12.57
131210039	Georgia	Fulton	15.10	13.38	13.46	13.23	13.31	13.11	13.19
390617001	Ohio	Hamilton	15.10	12.66	12.67	12.12	12.13	12.08	12.10
390350065	Ohio	Cuyahoga	15.10	13.22	13.23	12.71	12.73	12.63	12.64
180970083	Indiana	Marion	15.06	12.89	12.90	12.47	12.48	12.45	12.47

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 39. Average 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering the Cumulative Effects of Additional Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Average 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).				
				\$500/ton Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$500/ton With GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$2,300/ton Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$2,300/ton With GA, IN, KS, NE, NY, OH, and SC Budget Increases	Control Scenario Without GA, IN, KS, NE, NY, OH, and SC Budget Increases
<b>Additional Emissions Added to Georgia (tons)</b>			0	40,334	0	40,334	0	40,334
<b>Additional Emissions Added to Indiana (tons)</b>			0	5,338	0	5,338	0	5,338
<b>Additional Emissions Added to Kansas (tons)</b>			0	452	0	452	0	452
<b>Additional Emissions Added to Nebraska (tons)</b>			0	3,110	0	3,110	0	3,110
<b>Additional Emissions Added to New York (tons)</b>			0	5,444	0	5,444	0	5,444
<b>Additional Emissions Added to Ohio (tons)</b>			0	5,163	0	5,163	0	5,163
<b>Additional Emissions Added to South Carolina (tons)</b>			0	8,013	0	8,013	0	8,013
420030064**	Pennsylvania	Allegheny	56.71	47.57	47.59	45.54	45.56	45.46
420030093**	Pennsylvania	Allegheny	39.11	32.19	32.21	30.25	30.27	29.88
390350038**	Ohio	Cuyahoga	39.46	34.18	34.19	33.51	33.53	33.47
261630016**	Michigan	Wayne	38.99	34.42	34.42	33.93	33.94	33.88
390350060	Ohio	Cuyahoga	37.78	31.50	31.53	30.61	30.64	30.51
170311016**	Illinois	Cook	37.58	34.14	34.16	33.14	33.16	32.97
261630033**	Michigan	Wayne	39.48	36.32	36.34	35.01	35.03	34.76
180890022**	Indiana	Lake	34.94	32.80	32.82	32.39	32.40	32.31
540090011	West Virginia	Brooke	37.57	30.60	30.62	29.07	29.10	28.84
420710007**	Pennsylvania	Lancaster	35.98	35.19	35.19	34.95	34.95	34.87
390350045	Ohio	Cuyahoga	34.80	27.69	27.73	26.30	26.32	26.24
390811001	Ohio	Jefferson	34.56	27.64	27.67	25.79	25.82	25.57
261630019**	Michigan	Wayne	37.34	35.28	35.29	34.93	34.94	34.88
390350065	Ohio	Cuyahoga	34.91	27.66	27.69	26.11	26.15	25.96
170313301	Illinois	Cook	34.97	31.11	31.13	30.54	30.55	30.36
420070014	Pennsylvania	Beaver	36.21	29.28	29.30	27.59	27.60	27.40
420033007	Pennsylvania	Allegheny	32.40	26.27	26.29	24.88	24.90	24.78
010730023	Alabama	Jefferson	36.96	31.93	31.99	31.61	31.67	31.11
550790026	Wisconsin	Milwaukee	33.62	30.51	30.52	30.18	30.19	30.11
180970043	Indiana	Marion	35.76	28.64	28.69	27.16	27.21	27.14
261470005	Michigan	St Clair	36.23	33.35	33.37	32.78	32.80	32.68
550790043	Wisconsin	Milwaukee	36.21	32.53	32.54	31.89	31.90	31.84
180890026	Indiana	Lake	34.08	30.91	30.92	30.52	30.53	30.49
180970081	Indiana	Marion	35.85	28.44	28.47	27.35	27.39	27.30
180970066	Indiana	Marion	35.73	29.22	29.26	28.13	28.17	28.10
171191007	Illinois	Madison	36.59	29.94	29.95	29.34	29.35	29.34
550790010	Wisconsin	Milwaukee	35.47	31.54	31.55	30.86	30.87	30.86
390170003	Ohio	Butler	34.40	28.07	28.11	26.49	26.52	26.48
170316005	Illinois	Cook	34.12	32.72	32.73	32.41	32.42	32.04
420031008	Pennsylvania	Allegheny	35.04	26.95	26.98	24.69	24.72	24.49
261610008	Michigan	Washtenaw	35.05	29.40	29.44	28.55	28.56	28.47
170312001	Illinois	Cook	33.62	29.85	29.85	29.58	29.59	29.51
170310052	Illinois	Cook	34.94	30.12	30.12	29.79	29.79	29.70
421330008	Pennsylvania	York	33.38	31.60	31.61	31.03	31.04	30.93
261630015	Michigan	Wayne	35.55	32.23	32.25	31.10	31.11	31.02
010732003	Alabama	Jefferson	35.31	31.42	31.47	31.10	31.16	30.63
390618001	Ohio	Hamilton	35.29	27.63	27.67	26.11	26.14	25.97
171190023	Illinois	Madison	35.11	29.23	29.25	28.49	28.50	28.43
420031301	Pennsylvania	Allegheny	33.95	27.16	27.19	25.21	25.24	24.97
391130032	Ohio	Montgomery	33.68	24.40	24.44	23.15	23.17	23.10
420030116	Pennsylvania	Allegheny	35.59	27.97	28.00	26.34	26.36	26.14
								26.17

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 40. Maximum 24-hour PM<sub>2.5</sub> DVs ( $\mu\text{g}/\text{m}^3$ ) in 2014 for SO<sub>2</sub> Emission Scenarios Assessed Using AQAT\*\*\* – Considering the Cumulative Effects of Additional Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina Emissions.

Monitor Identification Number*	State	County	CAMx 2012 Base Case ( $\mu\text{g}/\text{m}^3$ )	AQAT 2014 Maximum 24-hour PM2.5 Design Values ( $\mu\text{g}/\text{m}^3$ ).					
				\$500/ton Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$500/ton With GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$2,300/ton Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	\$2,300/ton With GA, IN, KS, NE, NY, OH, and SC Budget Increases	Control Scenario Without GA, IN, KS, NE, NY, OH, and SC Budget Increases	Control Scenario With GA, IN, KS, NE, NY, OH, and SC Budget Increases
<b>Additional Emissions Added to Georgia (tons)</b>			0	40,334	0	40,334	0	40,334	40,334
<b>Additional Emissions Added to Indiana (tons)</b>			0	5,338	0	5,338	0	5,338	5,338
<b>Additional Emissions Added to Kansas (tons)</b>			0	452	0	452	0	452	452
<b>Additional Emissions Added to Nebraska (tons)</b>			0	3,110	0	3,110	0	3,110	3,110
<b>Additional Emissions Added to New York (tons)</b>			0	5,444	0	5,444	0	5,444	5,444
<b>Additional Emissions Added to Ohio (tons)</b>			0	5,163	0	5,163	0	5,163	5,163
<b>Additional Emissions Added to South Carolina (tons)</b>			0	8,013	0	8,013	0	8,013	8,013
420030064**	Pennsylvania	Allegheny	59.93	50.72	50.74	48.63	48.65	48.53	48.56
420030093**	Pennsylvania	Allegheny	44.40	36.85	36.88	34.80	34.83	34.29	34.34
390350038**	Ohio	Cuyahoga	41.84	35.93	35.94	35.41	35.42	35.39	35.42
261630016**	Michigan	Wayne	41.28	36.20	36.20	35.66	35.66	35.61	35.62
390350060	Ohio	Cuyahoga	40.85	33.70	33.72	33.04	33.07	32.95	32.97
170311016**	Illinois	Cook	40.44	37.41	37.43	36.55	36.56	36.41	36.46
261630033**	Michigan	Wayne	39.81	36.59	36.62	35.23	35.26	34.97	35.01
180890022**	Indiana	Lake	39.58	37.01	37.03	36.51	36.54	36.31	36.35
540090011	West Virginia	Brooke	38.39	32.23	32.27	30.02	30.06	29.64	29.69
420710007**	Pennsylvania	Lancaster	38.37	37.43	37.43	37.18	37.18	37.08	37.08
390350045	Ohio	Cuyahoga	38.13	29.49	29.53	27.60	27.63	27.44	27.46
390811001	Ohio	Jefferson	37.88	30.27	30.31	28.03	28.06	27.76	27.81
261630019**	Michigan	Wayne	37.83	36.21	36.22	35.83	35.84	35.75	35.76
390350065	Ohio	Cuyahoga	37.67	28.80	28.84	27.00	27.04	26.82	26.88
170313301	Illinois	Cook	37.67	33.36	33.37	32.85	32.86	32.71	32.73
420070014	Pennsylvania	Beaver	37.42	30.46	30.49	28.70	28.72	28.50	28.53
420033007	Pennsylvania	Allegheny	37.40	30.73	30.75	28.81	28.83	28.64	28.67
010730023	Alabama	Jefferson	37.33	32.50	32.58	32.12	32.19	31.57	31.64
550790026	Wisconsin	Milwaukee	37.24	33.57	33.58	33.24	33.25	33.14	33.15
180970043	Indiana	Marion	37.20	29.00	29.05	27.82	27.85	27.77	27.81
261470005	Michigan	St Clair	37.14	34.16	34.19	33.38	33.39	33.30	33.32
550790043	Wisconsin	Milwaukee	37.10	34.26	34.27	33.96	33.96	33.95	33.96
180890026	Indiana	Lake	37.06	33.67	33.68	33.37	33.38	33.39	33.40
180970081	Indiana	Marion	36.96	28.83	28.87	27.59	27.63	27.55	27.61
180970066	Indiana	Marion	36.92	30.40	30.45	29.13	29.18	29.11	29.18
171191007	Illinois	Madison	36.83	31.20	31.21	30.68	30.70	30.67	30.68
550790010	Wisconsin	Milwaukee	36.71	33.50	33.51	33.16	33.17	33.17	33.18
390170003	Ohio	Butler	36.59	28.71	28.73	27.33	27.35	27.30	27.35
170316005	Illinois	Cook	36.42	35.10	35.10	34.82	34.83	34.47	34.49
420031008	Pennsylvania	Allegheny	36.35	28.15	28.19	25.62	25.66	25.40	25.45
261610008	Michigan	Washtenaw	36.32	30.20	30.23	29.33	29.34	29.27	29.29
170312001	Illinois	Cook	36.12	32.71	32.72	32.34	32.35	32.22	32.24
170310052	Illinois	Cook	36.07	30.62	30.63	30.32	30.33	30.21	30.22
421330008	Pennsylvania	York	36.06	34.56	34.56	33.92	33.92	33.80	33.82
261630015	Michigan	Wayne	36.00	33.04	33.06	31.99	32.00	31.92	31.94
010732003	Alabama	Jefferson	35.94	32.23	32.28	31.91	31.97	31.46	31.53
390618001	Ohio	Hamilton	35.85	28.23	28.27	26.73	26.75	26.65	26.68
171190023	Illinois	Madison	35.81	30.23	30.25	29.50	29.51	29.43	29.45
420031301	Pennsylvania	Allegheny	35.65	28.05	28.08	26.15	26.17	25.86	25.89
391130032	Ohio	Montgomery	35.61	25.99	26.02	24.62	24.64	24.54	24.60
420030116	Pennsylvania	Allegheny	35.59	27.97	28.00	26.34	26.36	26.14	26.17

\*Monitors are in order of decreasing 2012 base case Maximum DV.

\*\* Identify receptors that have maximum design values greater than or equal to 35.5  $\mu\text{g}/\text{m}^3$  at the \$500 cost threshold in 2014 (as modeled in AQAT in the TR).

\*\*\*Assessments consider the emission budget changes from the final revisions rule.

Table 41. The Percentage of the Direct Final Annual NO<sub>x</sub> Emission Increase (tons) as a Function of Total Annual NO<sub>x</sub> Emissions from all Source Sectors (tons) Including the Final Revisions Rule Emissions.<sup>6</sup>

State	2014 “Remedy” Control Scenario Total Annual NO <sub>x</sub> Emissions	Direct Final Annual NO <sub>x</sub> Emission Increase	Direct Final Annual NO <sub>x</sub> Emission Increase as a Percentage of 2014 “Remedy” Total Emissions
Alabama	315,155		
Arkansas	194,964		
Connecticut	80,793		
Delaware	31,744		
District of Columbia	9,773		
Florida	616,154		
Georgia	395,764	13,198	3.3%
Illinois	540,361		
Indiana	424,250		
Iowa	217,221		
Kansas	240,384	5,794	2.4%
Kentucky	286,806		
Louisiana	466,098		
Maine	61,657		
Maryland	181,533		
Massachusetts	175,316		
Michigan	447,772		
Minnesota	338,438		
Mississippi	216,224		
Missouri	352,631	26	0.0%
Nebraska	173,170		
New Hampshire	47,482		
New Jersey	210,520		
New York	461,412	694	0.2%
North Carolina	317,230		
North Dakota	127,127		
Ohio	508,054	2,765	0.5%
Oklahoma	305,859		
Pennsylvania	514,563		
Rhode Island	18,808		
South Carolina	202,118		
South Dakota	65,500		
Tennessee	293,339		
Texas	1,369,987	2,731	0.2%
Vermont	22,824		
Virginia	333,985		
West Virginia	155,245		
Wisconsin	257,462		

<sup>6</sup> For additional details about emission budgets and unit-level allocations see the Final Revisions Rule State Budgets and New Unit Set-Asides TSD and the Final Revisions Rule Unit-Level Allocations under the FIPs in the docket to this rulemaking.

Table 42. The Percentage of the Direct Final Ozone-Season NO<sub>x</sub> Emission Increase (tons) as a Function of Total Ozone-Season NO<sub>x</sub> Emissions from all Source Sectors (tons) Including the Final Revisions Rule Emissions.<sup>7</sup>

State	2014 “Remedy” Control Scenario Total Ozone-Season NO <sub>x</sub> Emissions	Direct Final Ozone-Season NO <sub>x</sub> Emission Increase	Direct Final Ozone-Season NO <sub>x</sub> Emission Increase as a Percentage of 2014 “Remedy” Total Emissions
Alabama	126,382		
Arkansas	87,920	73	0.1%
Connecticut	31,133		
Delaware	13,693		
District of Columbia	3,805		
Florida	261,497		
Georgia	161,301	5,762	3.6%
Illinois	221,011		
Indiana	176,143		
Iowa	97,478		
Kansas	97,635		
Kentucky	117,179		
Louisiana	199,940	89	0.0%
Maine	24,427		
Maryland	74,401		
Massachusetts	68,324		
Michigan	180,549		
Minnesota	144,960		
Mississippi	91,480	115	0.1%
Missouri	149,213	26	0.0%
Nebraska	74,095		
New Hampshire	18,785		
New Jersey	84,110		
New York	184,723	127	0.1%
North Carolina	130,132		
North Dakota	59,336		
Ohio	208,281	1,221	0.6%
Oklahoma	125,457	859	0.7%
Pennsylvania	208,800		
Rhode Island	7,251		
South Carolina	83,215		
South Dakota	31,739		
Tennessee	119,966		
Texas	578,301	1,142	0.2%

<sup>7</sup> For additional details about emission budgets and unit-level allocations see the Final Revisions Rule State Budgets and New Unit Set-Asides TSD and the Final Revisions Rule Unit-Level Allocations under the FIPs in the docket to this rulemaking.

Vermont	8,796		
Virginia	136,976		
West Virginia	63,770		
Wisconsin	104,890		

## Appendix A.

Documents, worksheets, and workbooks from the final TR used in this analysis (with the relevant document identification number) as well as a list of additional files created for this assessment. In addition, a list of abbreviations along with brief descriptions of the various AQAT simulations used in this assessment is included at the end of this appendix.

Annual and Quarterly Emissions for all AQAT Simulations. EPA-HQ-OAR-2009-0491-4530

AQAT\_emissions\_finalrevrule.xlsx

contains the emissions and fraction of emissions for each scenario in the revisions rule and direct final rule relative to the total emissions in the 2012 base case from the final TR.

These files contain the 24-hour PM2.5 2012 base case and 2014 AQAT Calibration Scenario contributions.

QTR1\_base\_and\_AQAT\_calibration\_scenario\_contributions.xlsx EPA-HQ-OAR-2009-0491-4531

QTR2\_base\_and\_AQAT\_calibration\_scenario\_contributions.xlsx EPA-HQ-OAR-2009-0491-4532

QTR3\_base\_and\_AQAT\_calibration\_scenario\_contributions.xlsx EPA-HQ-OAR-2009-0491-4533

QTR4\_base\_and\_AQAT\_calibration\_scenario\_contributions.xlsx EPA-HQ-OAR-2009-0491-4534

The annual PM2.5 and 24-hour PM2.5 calibration factors can be found in the respective files in the TR docket. The annual PM2.5 calibration factors are also included in the AnnualPM2.5 AQAT workbook.

Annual PM Calibration Factors.xlsx EPA-HQ-OAR-2009-0491-4535

Daily PM Calibration Factors.xlsx EPA-HQ-OAR-2009-0491-4464

These files contain the quarterly contributions and calibrated Relative Response Factors (RRFs) for selected 24-hour PM2.5 simulations (CT refers to cost threshold). The files from the final TR are listed here (along with their docket identification numbers), as well as the additional files that have been created and used for this assessment. The file name identifies whether the file is a cost threshold (CT) or a “remedy” control scenario (rem) and identifies which states, if any, are being adjusted.

dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT.xlsx EPA-HQ-OAR-2009-0491-4492

dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT.xlsx EPA-HQ-OAR-2009-0491-4488

dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300\_remedy.xlsx EPA-HQ-OAR-2009-0491-4487

dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_TXNYWI.xlsx

dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_GA.xlsx

dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_IN.xlsx

dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_KS.xlsx

dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_NE.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_NY.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_OH.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_SC.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem\_all.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300rem.xlsx (recreating the final TR file)  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_TXNYWI.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_GA.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_IN.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_KS.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_NE.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_NY.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_OH.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_SC.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT\_all.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_2300CT.xlsx (recreating the final TR file)  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_TXNYWI.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_GA.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_IN.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_KS.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_NE.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_NY.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_OH.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_SC.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT\_all.xlsx  
dailyPM\_adjusted sulfate contributions and RRF\_2014\_500CT.xlsx (recreating the final TR file)

dailyPM\_allyears\_high\_quarters\_finalrevdirfinal.xlsx. This file contains a summary of the estimated 98th percentile values and resulting average and maximum design values for all 24-hour PM2.5 AQAT cost threshold level and remedy simulations. It also contains a summary worksheet, where the design values are sorted in order of decreasing maximum 2012 base case design value (the same key as used in the tables in this document).

The following files apply the RRFs to each of the 32 days per year for each of the 5 years of available receptor estimates. The result is the estimated 24-hour PM2.5 concentration for that day. The 98th percentile day is also identified in these files. They are in 2014.

dailyPM\_all\_years\_all\_quarters\_base\_500CT.xlsx EPA-HQ-OAR-2009-0491-4540  
dailyPM\_all\_years\_all\_quarters\_base\_2300CT.xlsx EPA-HQ-OAR-2009-0491-4505  
dailyPM\_all\_years\_all\_quarters\_2300\_remedy.xlsx EPA-HQ-OAR-2009-0491-4569

The additional files in this assessment are:

dailyPM\_all\_years\_all\_quarters\_2300\_rem\_TXNYWI.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_rem\_GA.xlsx

dailyPM\_all\_years\_all\_quarters\_2300\_rem\_IN.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_rem\_KS.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_rem\_NE.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_rem\_NY.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_rem\_OH.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_rem\_SC.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_rem\_all.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_rem.xlsx (recreating the final TR file)  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_TXNYWI.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_GA.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_IN.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_KS.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_NE.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_NY.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_OH.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_SC.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT\_all.xlsx  
dailyPM\_all\_years\_all\_quarters\_2300\_CT.xlsx (recreating the final TR file)  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_TXNYWI.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_GA.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_IN.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_KS.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_NE.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_NY.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_OH.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_SC.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT\_all.xlsx  
dailyPM\_all\_years\_all\_quarters\_500\_CT.xlsx (recreating the final TR file)

The file annualPM25 AQAT.xlsx file EPA-HQ-OAR-2009-0491-4458 contains the base contributions, AQAT calibration scenario contributions, calibrated contributions, and estimated design values for all annual PM2.5 AQAT simulations for the final TR.

A new file, containing the annual AQAT estimates for this assessment (the final revisions rule and direct final rule) is called “annualPM25 AQAT\_rev\_final.xlsx”

A list of the abbreviations, used throughout the excel workbooks, which identify specific AQAT simulations used in this assessment:

2300 rem TX NY WI. This is a simulation of the 2014 "remedy" control scenario with the final emission revisions made for Texas, New York, and Wisconsin.

2300 rem GA. This is a simulation of the 2014 "remedy" control scenario with the emission revisions in the direct final rule made for Georgia as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 rem IN. This is a simulation of the 2014 "remedy" control scenario with the emission revisions in the direct final rule made for Indiana as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 rem KS. This is a simulation of the 2014 "remedy" control scenario with the emission revisions in the direct final rule made for Kansas as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 rem NE. This is a simulation of the 2014 "remedy" control scenario with the emission revisions in the direct final rule made for Nebraska as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 rem NY. This is a simulation of the 2014 "remedy" control scenario with the emission revisions in the direct final rule made for New York as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 rem OH. This is a simulation of the 2014 "remedy" control scenario with the emission revisions in the direct final rule made for Ohio as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 rem SC. This is a simulation of the 2014 "remedy" control scenario with the emission revisions in the direct final rule made for South Carolina as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 rem all. This is a simulation of the 2014 "remedy" control scenario with the emission revisions in the direct final rule made for Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 rem. This is a simulation of the 2014 "remedy" control scenario with emissions from the final Transport Rule.

2300 CT TX NY WI. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the final emission revisions made for Texas, New York, and Wisconsin.

2300 CT GA. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the emission revisions in the direct final rule made for Georgia as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 CT IN. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the emission revisions in the direct final rule made for Indiana as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 CT KS. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the emission revisions in the direct final rule made for Kansas as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 CT NE. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the emission revisions in the direct final rule made for Nebraska as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 CT NY. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the emission revisions in the direct final rule made for New York as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 CT OH. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the emission revisions in the direct final rule made for Ohio as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 CT SC. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the emission revisions in the direct final rule made for South Carolina as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 CT all. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with the emission revisions in the direct final rule made for Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

2300 CT. This is a simulation of the 2014 \$2,300/ton cost threshold scenario with emissions from the final Transport Rule.

500 CT TX NY WI. This is a simulation of the 2014 \$500/ton cost threshold scenario with the final emission revisions made for Texas, New York, and Wisconsin.

500 CT GA. This is a simulation of the 2014 \$500/ton cost threshold scenario with the emission revisions in the direct final rule made for Georgia as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

500 CT IN. This is a simulation of the 2014 \$500/ton cost threshold scenario with the emission revisions in the direct final rule made for Indiana as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

500 CT KS. This is a simulation of the 2014 \$500/ton cost threshold scenario with the emission revisions in the direct final rule made for Kansas as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

500 CT NE. This is a simulation of the 2014 \$500/ton cost threshold scenario with the emission revisions in the direct final rule made for Nebraska as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

500 CT NY. This is a simulation of the 2014 \$500/ton cost threshold scenario with the emission revisions in the direct final rule made for New York as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

500 CT OH. This is a simulation of the 2014 \$500/ton cost threshold scenario with the emission revisions in the direct final rule made for Ohio as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

500 CT SC. This is a simulation of the 2014 \$500/ton cost threshold scenario with the emission revisions in the direct final rule made for South Carolina as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

500 CT all. This is a simulation of the 2014 \$500/ton cost threshold scenario with the emission revisions in the direct final rule made for Georgia, Indiana, Kansas, Nebraska, New York, Ohio, and South Carolina as well as the emission changes for Texas, New York, and Wisconsin included in the final revisions rule.

500 CT. This is a simulation of the 2014 \$500/ton cost threshold scenario with emissions from the final Transport Rule.